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Maintaining milk supply as the baby grows

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Letters to the Editor

Maintaining milk supply as the baby grows

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The article on drugs affecting milk supply during lactation states that babies drink 150 mL/kg/day.¹ This calculation is used for newborns and for formula-fed babies, but is not applicable to breastfed babies past the early days. Research from the Hartmann Human Lactation Research Group at the University of Western Australia showed that from one month until six months of age, babies drink on average 800 mL/day.² The amount varies only minimally with age and weight, contrary to previous belief, although the average intake from baby to baby can vary from 500 mL to 1350 mL/day. At six months when solid foods are normally introduced, this amount gradually reduces. It is misleading to report that mothers in general need to produce 1350 mL/day, when this is at the very upper limit determined from the Hartmann study and a volume that would be consumed by very few babies.

Please could you correct this information? Fully referenced amounts are available on the Australian Breastfeeding Association website.³

Kerry Smith
Breastfeeding mother
Perth

REFERENCES

1. McGuire TM. Drugs affecting milk supply during lactation. *Aust Prescr* 2018;41:7-9. <https://doi.org/10.18773/austprescr.2018.002>
2. 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. <https://doi.org/10.1542/peds.2005-1417>
3. Exclusive expressing. Melbourne: Australian Breastfeeding Association; 2017. www.breastfeeding.asn.au/bfinfo/exclusive-expressing [cited 2018 May 1]

Thank you for the article on drugs affecting milk supply in lactation.¹ This area is of particular interest to me as a community pharmacist and a breastfeeding mother myself. I enjoyed the article and it was relevant to many of the situations that I come across in the community.

I did notice that some of the information about milk supply differs from the current Australian

Breastfeeding Association guidelines. The article states that maintaining the milk supply may be problematic as the baby grows. An infant typically requires 150 mL/kg/day. So, to feed a 9 kg versus a 3 kg baby daily (1350 mL vs 450 mL) can be a physiological challenge for some women. While I have seen references to 150 mL/kg/day used, most conclude that milk intake of exclusively breastfed infants averages 750–800 mL/day, but can vary from less than 500 mL to more than 1000 mL/day.

My current understanding is that the volume of breastmilk consumed is typically consistent from one to six months of age.² I would also add that in my experience, it is extremely uncommon for mothers to successfully establish breastfeeding then be physiologically challenged to produce enough milk as their baby grows, if they have been advised to feed according to their baby's needs without supplementing with formula or solid food.

Is there a reference to support mothers being physiologically challenged as their babies get older?

Kylie Hulkes
Community pharmacist
Karratha, WA

REFERENCES

1. McGuire TM. Drugs affecting milk supply during lactation. *Aust Prescr* 2018;41:7-9. <https://doi.org/10.18773/austprescr.2018.002>
2. 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. <https://doi.org/10.1542/peds.2005-1417>

Treasure McGuire, the author of the article, comments:

Thank you to Kerry and Kylie for commenting on my article. The 150 mL/kg/day figure originated from a breastfeeding counselling training course by the World Health Organization.¹ It remains widely used in calculations for the amount of medication transferred from a breastfeeding mother to her infant. It is also often used to calculate the amount of expressed breast milk or infant formula infants require.

There is evidence suggesting that the intake for most (but not all) breastfed infants who are growing well is relatively constant from one to six months of age with a mean intake of approximately 800 mL, but with a wide range in milk volume.²⁻⁴ However, limitations to the 2006 Hartmann study were that milk samples were collected over a single 24-hour



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period and total milk volumes were not stratified by infant age.³ A more recent longitudinal study by Hartmann's group also found a wide range in milk volume (463–1370 mL), but with only six mothers in the 'milk production during exclusive breastfeeding' arm.⁴ Further longitudinal research with larger participant numbers is needed in this area.

A 9 kg infant would be a large six-month-old and so was not the best example to use in any calculations. However, these figures are not essential for the main content of the article and were used to illustrate the point that some women have difficulty maintaining an adequate milk supply. Often this is due to suboptimal breastfeeding management, but for others there are physiological (including hormonal) or anatomical reasons why they have difficulty with their milk supply, especially as the infant grows. These women may benefit from the galactagogues that are discussed in the article.

REFERENCES

1. World Health Organization, UNICEF. Breastfeeding counselling: a training course. WHO/CDR/93.3-5. Geneva: WHO; 1993. http://www.who.int/maternal_child_adolescent/documents/who_cdr_93_3/en [cited 2018 May 1]
2. Reilly JJ, Ashworth S, Wells JC. Metabolisable energy consumption in the exclusively breast-fed infant aged 3--6 months from the developed world: a systematic review. *Br J Nutr* 2005;94:56-63. <https://doi.org/10.1079/BJN20051464>
3. Kent JC, Mitoulas LR, Cregan MD, Ramsay DT, Doherty DA, Hartmann PE. Volume and frequency of breastfeedings and fat content of breastmilk throughout the day. *Pediatrics* 2006;117:e387-95. <https://doi.org/10.1542/peds.2005-1417>
4. Kent JC, Hepworth AR, Sherriff JL, Cox DB, Mitoulas LR, Hartmann PE. Longitudinal changes in breastfeeding patterns from 1 to 6 months of lactation. *Breastfeed Med* 2013;8:401-7. <https://doi.org/10.1089/bfm.2012.0141>