

Supporting mothers to effectively activate milk production: Hand expression and pumping clarified

When an infant is unable to effectively stimulate the breast in the first few days after birth, activation of the milk-making cells is jeopardized,¹⁻⁴ potentially delaying milk 'coming in'^{5,6} and impairing long-term milk production.⁷⁻⁸

Provision of immediate lactation support is critical when ineffective feeding is identified.⁹

Options to address ineffective feeds

When breastfeeding remains ineffective, even after skilled breastfeeding support has been provided, the following interventions are currently used:



Electric pumps use vacuum¹⁰ to effectively trigger the prolactin response,¹¹ activating the milk-making cells²⁻⁴ and removing colostrum.

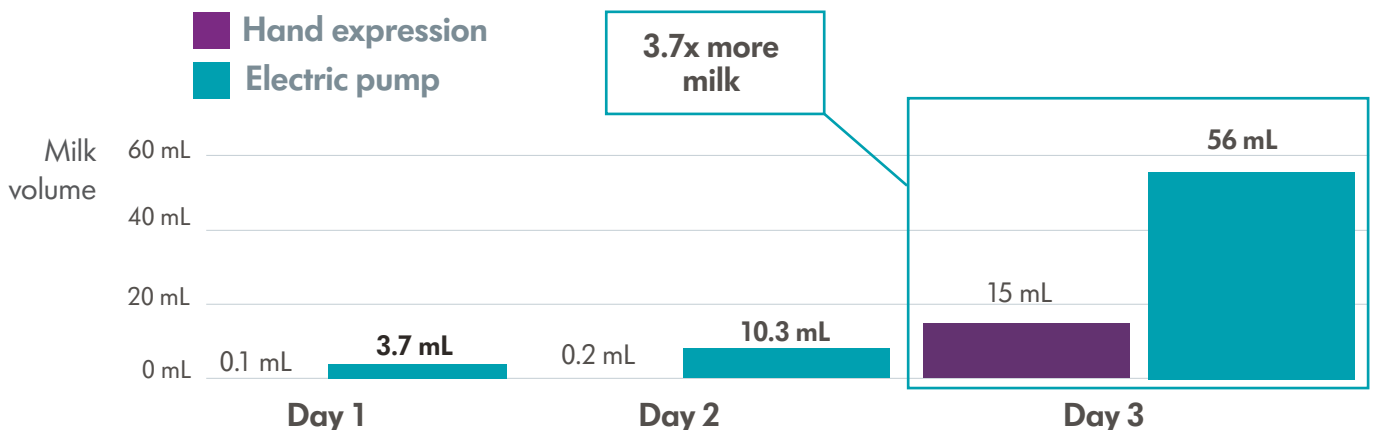


Hand Expression uses tactile compression to facilitate milk ejection and colostrum collection. Hand expression is a useful tool to complement the breastfeeding journey.

However, hand expression alone, which **lacks vacuum, has been shown to be less effective at triggering the prolactin response,¹¹ vital to activate the milk-making cells.²⁻⁴**




Electric pumping alone has been shown to produce significantly more milk than hand expression alone:^{3,4}

- An RCT comparing hand expression to electric pumping in mothers of very low birth weight infants found electric pumping yielded 3.7 times more milk volume by day 3 after birth.³
- Mothers who switched from hand expression to electric pumping after day 7, did not catch up with the volume of the mothers using an electric pump from the beginning.³



Comparing the effective infant feed to expression methods

Effective breastfeeding is always the gold standard, as it provides the perfect suckling vacuum¹² to stimulate the breast and remove colostrum.

	Vacuum	Tactile compression	Colostrum collection	Effectively activate milk-making cells	Reduced risk of delayed secretory activation
	✓	✓	✓	✓	✓
	✓	✗	✓*	✓	✓
	✗	✓	✓	✗	✗

*Tiny volumes of colostrum are sometimes difficult to recover, which can lead to wastage

Although **hand expression** lacks the vacuum required to effectively activate the milk-making cells in the early days,^{2-4,11} mothers should always be taught the valuable skill of hand expression to support a prolonged breastfeeding journey.

It is a useful tool to

◀ Relieve engorgement, manage blocked ducts and relieve symptoms of mastitis.¹³

◀ Express a few drops to encourage the baby to breastfeed.¹³

	✓	✓	✓	✓	✓
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When infant feeding is ineffective, a combination of hand expression and double, electric pumping provides:

◀ A solution to collect colostrum.

◀ The vacuum required to effectively activate the milk-making cells.^{2,11}

◀ Optimum milk volumes in the future.³



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