

PEARLS Practical Evidence About Real Life Situations

Mechanical pumps are effective for expressing milk

Clinical question	How effective are mechanical pumps for milk expression in lactating women?
Bottom line	Mothers appear to obtain greater total volumes of milk in a 6-day period within 2 weeks of birth using an electric or foot-powered pump compared to hand expression, and a greater volume at 1 expression during the second week when provided with a relaxation tape. Simultaneous pumping of both breasts takes less time compared to sequential pumping but gives similar milk volumes. One small study found hand-expressed and pump-expressed milk had a similar incidence of milk contamination.
Caveat	Methodological shortcomings of some trials, especially small sample sizes and very large standard deviations, the small number of studies reviewed for each outcome, and the diversity in the nature, duration and frequency of the interventions argue caution in applying these results beyond the specific equipment tested in the specific settings. Maternal satisfaction, adverse effects on mothers and economic effects of interventions were poorly reported. Eight of the 10 studies that evaluated pumps or other products had support from the manufacturers.
Context	The World Health Organization recommends that infants be fed exclusively on human milk from birth to 6 months of age. Children who do not receive human milk are more likely to suffer health problems. Not all babies are able to feed at the breast because of prematurity, illness, abnormalities, or separation from their mothers. These babies need expressed milk. Mothers may also express milk for their own comfort if they have sore nipples or engorgement; to increase milk supply; or to leave milk if away from their baby.
Cochrane Systematic Review	Becker GE et al. Methods of milk expression for lactating women. Cochrane Reviews 2008, Issue 4. Article No. CD006170. DOI:10.1002/14651858.CD006170.pub 2. This review contains 12 studies involving 397 participants

PEARLS are succinct summaries of Cochrane Systematic Reviews for primary care practitioners. They are funded by the New Zealand Guidelines Group.

PEARLS provide guidance on whether a treatment is effective or ineffective. PEARLS are prepared as an educational resource and do not replace clinician judgement in the management of individual cases.

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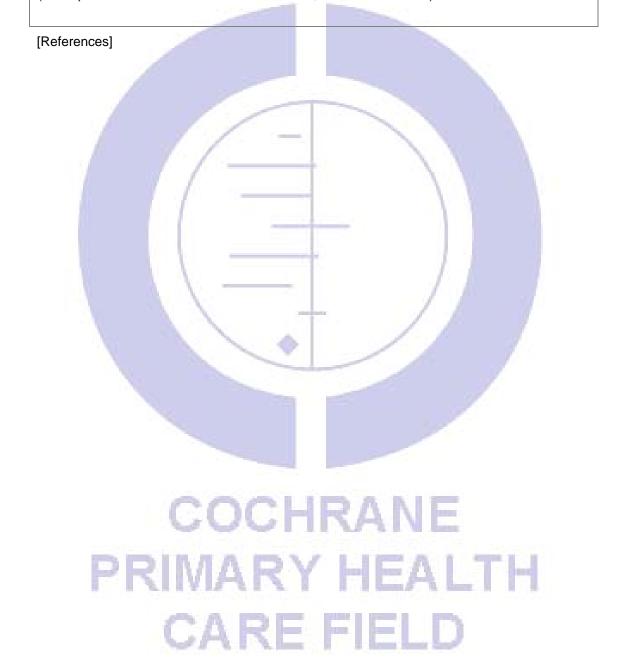


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in 5 different countries.

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