Today, feeding expressed milk, usually by bottle, is being ‘normalised’. This mode of infant feeding has shifted from something needed in relatively few circumstances to the norm, with personal, family, industrial relations, and women’s rights implications. We have seen the feeding of infants with artificial baby milks develop from its rightful place as an option required in only a limited range of circumstances, to being seen as a life choice or even a necessity, helped by the power of marketing. The definitions below (Box 1) provide a basis for the discussion which follows (Thorley 2010).

Box 1: Definitions

**Breastfeeding:** nurturing the baby directly at the breast  
**Breastmilk feeding:** feeding expressed milk to a baby, usually by bottle  
**Normalisation:** treating an intervention as similar or equal to what is normal, from use in special situations to essential

Breastmilk feeding has a place in specific circumstances, such as where the baby is unable to go to the breast directly or where the child is unable to provide adequate stimulus to the maternal milk supply. It is acknowledged that premature or sick infants may be too immature or weak to extract adequate milk from the breast by themselves once oral feeding is begun. For these infants, and in cases where separation is unavoidable, skill in providing human milk in other ways is desirable. However, as with the surge in artificial feeding in the late 19th century and the 20th century, breastmilk feeding is becoming a life ‘choice’. In some countries, advertising equates breastmilk feeding with breastfeeding — which it is not. Other advertising to the public suggests that pumping and giving the milk by bottle will give the mother ‘a break’ from breastfeeding (despite the additional work) or prevent harm if the baby has teeth (Avent 2011), creating doubt in the mother’s mind and failing to acknowledge that many mothers breastfeed babies and toddlers with teeth.

**WHAT MOTHERS AND BABIES LOSE**

Breastfeeding provides more than the milk, whereas breastmilk feeding changes the focus from infant cues to millilitres, from a relationship to a commodity (Thorley 2010). For instance, in breastfeeding, the mother and baby’s bodies are close enough for skin-to-skin contact, and suckling, swallowing and breathing are coordinated (Riordan & Wambach 2010). Lactating animals have a reduced reactivity to stress, and this effect has also been demonstrated in human studies of breastfeeding mothers (Groer et al 2002). Babies who are breastmilk fed are usually fed by bottle, unless they are too immature to suck. Mobbs (1989) has shown that mammals, including human babies, imprint through oral-tactile stimulus; that is, by the mouth coming into contact with a ‘suck object’, which is an innate survival mechanism. Without access to the mother’s nipple, their rightful source of food, they accept and may imprint on what Mobbs (2007) calls a ‘decoy object’. When mothers focus on volume — on millilitres — as seen in a bottle, they may lose confidence in the ability of their bodies to match supply with demand, and may turn to expressing or pumping to prove their breasts’ capacity to produce sufficient milk (Van Esterick 1996). This leads to increasing use of bottles.

When breastmilk feeding is resorted to unnecessarily, this may cause the mother and baby to be separated because it becomes...
possible to leave the baby. While the mother is absent, her baby is fed by bottle, even if the contents are her own milk. The unique supply–demand balance that comes with natural breastfeeding is interfered with, the mother and baby experience significantly less skin-to-skin contact, even if it is the mother who is bottle-feeding her baby with her milk. The mother has the additional chores of hygienic care of the pump and feeding vessels, and expressing and storing her milk.

**WHAT FATHERS LOSE**

When breastmilk feeding is done in the mistaken belief that fathers have a ‘right’ to feed babies, it creates more work for the mother and the father misses much better ways of bonding and interacting with his baby. Skin-to-skin contact facilitates the bonding process by increasing the levels of oxytocin in both parties, and in newborns supports a number of bodily systems (Moore, Anderson & Bergman 2007; Nykvist, Anderson & Bergman 2010). The idea that fathers need to feed their babies by bottle is a skewed view of both fathers’ rights and how best to enable father and baby to bond. Fathers can do so much more for their babies than feeding them, and can achieve far more skin-to-skin contact. Soothing their babies placed on their bare chests in just a nappy is a simple and effective way for fathers and their babies to interact and maximize skin-to-skin contact. Many of today’s fathers choose to take over their babies’ showering, another skin-to-skin opportunity. Bottle-feeding, on the other hand, places a postage-stamp sized area of the father’s wrist against a postage-stamp sized area of the baby’s neck (provided the baby’s clothes do not have a collar). Thus, bottle-feeding the baby is likely to reduce the opportunity for skin-to-skin contact, not enhance it (Thorley 2010).

**THE PROLIFERATION OF PUMP USE**

Breast pumps are marketed as facilitating breastfeeding and essential to the breastfeeding mother, which they are not (Glynn & Goosen 2005; Lawrence & Lawrence 2011; Van Esterik 1996). The purpose of marketing, including pump marketing, is to create a sense of need in the consumer, even where it did not previously exist (Drucker 1974). Breast pumps are a substitute for hand expression, a no-cost skill that is being lost in industrialised countries. Where women have been taught hand expression well, and when this simple skill is part of the culture, they can remove milk effectively without a pump. Poorly taught hand expression may be why Australian mothers lack confidence in this skill. Hospitals accredited under the Baby Friendly Hospital Initiative are required to teach mothers hand expression, or at least make them aware of written instructions, in order to achieve Step 5 of the *Ten Steps to Successful Breastfeeding* (WHO 1998). Lawrence and Lawrence (2011) recommend that all postnatal women be taught the skill of hand expression.

**MARKETING AND ETHICS**

While breast pumps themselves are not mentioned in the International Code of Marketing of Breast Milk Substitutes (WHO 1981), they are almost always advertised and packaged with bottles and teats, which are objects within the terms of the International Code (Article 2). Armstrong and Sokol (2001) have demonstrated that this marketing of pumps in association with bottles, with no information provided on alternatives or possible effects of casual use, is in breach of the Code. The visual image of the bottle with the pump in marketing literature is de facto advertising of bottles. Breastfeeding organisations and conference planners seek ‘ethical’ advertising revenue and sponsorships, refusing money from manufacturers of items within the scope of the International Code. However, promoting breast pumps as a breastfeeding aid leads to bottle-feeding, even if it is with mother’s milk (Thorley 2010). There is thus a potential conflict of interest when individuals or organisations pledged to support breastfeeding women receive funding or derive financial benefit from the breast pump industry (Helsing, Morrison & Savage 2009; Lawrence & Lawrence 2011; Van Esterik 1996).

**FAULTY PUMPS AND HARM**

Pumps are expensive. They are sometimes faulty, but women commonly blame their bodies, not the technology (Thorley 2007; Van Esterick 1996). The public perception that these mechanical devices are completely benign is optimistic as they sometimes cause harm (Dwyer 2008; Van Esterik 1996). In reports to the Food and Drug Administration in the United States, electric breast pumps have been associated with harm to mothers ranging from pain and discomfort to tissue damage, while manual pumps have been associated with tissue damage and infection (Lawrence & Lawrence 2011). In Australia, it is likely that only a small percentage of cases of ineffective pumps or actual harm are ever reported. Long-term pumping may also lead to reduced maternal milk supply and the introduction of artificial baby milk (Dwyer 2008; Van Esterik 1996). Electric pumps are vulnerable to power blackouts and lack of power sockets in cars or evacuation centres during natural disasters.

**WHAT ABOUT EMPLOYED MOTHERS?**

Improvements in workplace provisions for breastfeeding mothers can be held back by the current regard of pumping as normal. Mothers are counselled to prepare for their return to work by pumping and stocking the freezer during their maternity leave, and workplaces are considered supportive if they provide somewhere to pump and store milk (Angeletti 2009). The focus on pumps as sufficient to enable mothers and their babies to continue ‘breastfeeding’ leads to a lack of campaigning for industrial provisions for breastfeeding, such as workplace crèches and breastfeeding breaks. The current focus limits women’s choices (despite perceptions of more choice) (Thorley 2010). In effect, women are part-time breastfeeding and part-time breastmilk feeding, and in order to do this they have many of the same tasks as mothers who feed their babies artificial baby milk. Thus the focus on pumping and breastmilk feeding takes a restrictive view of women’s rights. It also cheats the baby, whose mother is unable to breastfeed in lactation breaks and at home has to take time to pump — time she could be using to interact with her baby.
In the interim, it may be difficult to change this status quo in workplaces, but we should not be complacent. Now is the time to devise policies and strategies, in order to start negotiating with management and unions to move forward so that breastfeeding women are not limited to pumping and breastmilk feeding as the only way to continue to provide their milk to their babies.

CONCLUSION: ACCURATE USE OF LANGUAGE
To anyone who may believe that this argument is unfair to mothers who are breastfeeding in the belief that they are ‘breastfeeding’, I say this: advocates for optimal infant feeding encountered a similar situation when we began to state clearly, more than a decade ago, that feeding babies with factory-made artificial baby milks is not an equal substitute for breastfeeding and brings with it potential long-term health deficits. We changed the language used from ‘benefits of breastfeeding’, which implied that artificial feeding was the norm, to examining the health repercussions of the lack of breastfeeding. The new challenge is to use language accurately, and tell mothers the truth, that feeding their milk to their babies by bottle is less than equivalent to breastfeeding, because breastfeeding is about more than the milk. I acknowledge that administering human milk to the baby at arm’s length from the mother is superior to administering animal milk at arm’s length from the mother. It is not, however, the equivalent of actual breastfeeding and there may be a cascade of unintended effects.

REFERENCES


ABOUT THE AUTHOR
Virginia Thorley has been involved in the breastfeeding field since 1966, when she qualified as a breastfeeding counsellor with both La Leche League and the Nursing Mothers’ Association of Australia (now the Australian Breastfeeding Association). In 1985 she was in the original cohort to certify as International Board Certified Lactation Consultants (IBCLC) and in 2008 she was one of the first to be inducted as a Fellow of the International Lactation Consultant Association (FILCA). She is the author of four books (two with multiple editions) and four chapters in books, and numerous articles in peer-reviewed journals. She holds an honorary position in the School of HPRC, University of Queensland.

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