The Bottle-First Method of Supplementation

Excerpted from "Making More Milk: A Nursing Mother's Guide to Milk Production" by Diana West, IBCLC, and Lisa Marasco, IBCLC May not be reproduced in any fashion without the express written permission of the authors

When bottles are used to give supplementation at any given feeding, traditional wisdom has been to only give them after the baby has had an opportunity to breastfeed. There are many lactation specialists who believe breastfeeding first when baby is most hungry ensures that he sucks most actively at breast and removes all of the mother's available milk. Their concern is that giving a bottle first would fill the baby up so that he would not suck as actively at breast and may not even want to take the breast at all. This premise has not been studied, however, and many mothers have found that when bottles are given after breastfeeding, babies have increasingly less patience to nurse and tend to actively suckle at breast for less and less time so that it seems necessary to give increasing amounts of supplementation by bottle. When babies do not remove all the milk in the breast, milk production slows down, resulting in the need for more supplementation. This is known as the "downward spiral" effect of bottle supplementation and may be the reason bottles have acquired such a poor reputation among breastfeeding advocates. To avoid this negative impact on milk production, it is helpful to either bring baby back to breast after the bottle-feeding or use a pump to ensure that the breast is fully drained.

Christina Smillie, MD, IBCLC, suggests an alternative way to use bottles for supplementation that she believes results in less supplementation, improved feeding at breast, less need for pumping, and an ultimately greater milk supply as a result of improved milk removal. In her private practice, she has observed that when babies have had their initial hunger and thirst satisfied by a bottle containing a <u>limited (controlled) amount of supplement given before</u> breastfeeding, they tend to have more patience to suckle at breast when the flow is slower due to suppressed supply. This results in their removal of more milk, which increases milk production.

An important reason for the effectiveness of offering supplementation by bottle *before* feedings at breast is that most babies seem to prefer a fast flow at the beginning of the feeding and they usually will suck vigorously only so long as the milk is actively flowing. The flow of most mothers with low milk supply is either slow from the beginning or slows very quickly, similar to the way in which a water balloon expels water forcibly when it is full, but much more slowly as it empties. When the milk supply is so low that the flow is reduced, a baby put to the breast first may not sustain active suckling long enough to extract all of the milk and hind-fat. Breast compression to increase the flow of milk is helpful to encourage the baby to resume suckling, but he is still likely to stop suckling vigorously as soon as the flow slows down again. Baby may not come off the breast entirely, but his suckling may seem less active and he may seem to hang out on the breast more than he would otherwise, seemingly "forgetting" to suck. Having the initial thirst met first at the bottle allows the infant to then enjoy the more slow flowing cream at his mother's breast.

Another important aspect of this method is that babies learn to associate security and pleasure with the way they are being fed at the end of the feeding when they experience the euphoria of satiation. When the bottle is given after feeding at breast, the mothers clearly see the babies get that "milk drunk," thoroughly contented look with the bottle, which often undermines their

confidence in breastfeeding, so that they tend to do it less and less. It can be disheartening to see that the baby is still hungry after breastfeeding and that he will devour a large amount of supplement, being satisfied after the bottle-feeding when he was not satisfied at the breast. When babies are permitted to end the feeding at the breast, they learn to associate their feelings of pleasure and satisfaction with being at breast, motivating them to feed longer and better at breast even when the flow is slow. Seeing their babies so obviously satisfied and contented at breast can be very satisfying and motivating mothers.

The key to this technique is not giving quite as much supplement in the bottle as the baby needs or had been getting. If too much is given, babies naturally will not feed well or long enough at breast. They must still be hungry enough to suck actively at breast. If too little is given, they may not have the patience to continue nursing when milk ejections slows. It sometimes takes a few feedings of trial and error to determine the best amount. See the description of the method below for more information on gauging the correct supplemental starting amount.

It is important to understand that the degree of increased production depends upon the cause of low supply. Low milk supply resulting from secondary causes is likely to have a greater response to this technique. Even when the milk supply seems to plateau, however, supplementation prior to feeding at breast may maximize milk production potential.

Dr. Smillie believes that it is important for mothers to be intuitive and flexible when following this method, and responsive to the body language feedback that the baby gives. She feels strongly that there is no one right way that works for all mothers and each mother must trust her own instincts to find the best method for her and her baby.

The "Finish at the Breast" Method

- 1. *Before* each breastfeeding, offer about one quarter to one half ounce less (7-15 ml) of supplement than the amount your baby has usually been taking after breastfeeds. After supplementing by bottle, allow baby to nurse as long as it is comfortable for both of you.
 - If the baby is significantly below his appropriate weight (see page ____), offer about one half to one ounce (15-30 ml) more than the amount recommended below until the baby begins to gain appropriately. Underweight babies sometimes need to "play catch up," which can require a temporary increase in their milk needs. Once baby has caught up, begin reducing the supplement as described below.
 - If your baby falls asleep before getting to the breast or will not take the breast at all, then the next time, reduce the amount of supplement at the next feeding by about one half ounce (15ml). Be sure to thoroughly pump to drain the breasts in order to remove what the baby "forgot" to drink, and to prevent reducing milk production.
 - On the other hand, if your baby is still hungry after breastfeeding so that it is necessary to give him a bottle afterwards to satisfy his hunger (bottle-breastbottle), increase the amount of supplement at the next feeding by about one half ounce (15 ml).
 - If your baby will not take the bottle at all, try offering the breast for a few minutes, then giving a bottle with about one half ounce (15 ml) less than normal, then finish the feed at breast (breast—bottle—breast).

- You may find that you can give a smaller amount of supplement (or none!) during the night and before the morning feedings, but in the late afternoon or early evening you may need to use more supplement. This is fine and follows the normal fluctuations in a mother's stored milk supply.ⁱ It may also be helpful to follow the suggestions on page ____ to increase your supply for the late afternoon or early evening feedings. When giving the bottle, be sure to watch your baby's face for relaxation, which indicates that he is becoming full. Even if he has not taken the full amount of the supplement, he may need to be switched to the breast so that he does not become overfilled by the supplement.
- 2. The fine-tuning process is definitely a matter of trial and error. As you find the right amount of supplement to offer and the baby is nursing better (actively sucking for longer amounts of time, relaxing fully as feeding progresses, audible swallowing sounds, breasts feeling softer after feedings, baby awakening on own for feedings), you can then begin to decrease the supplement by about one half ounce (15 ml) each feeding every few days so long as baby's diaper output and weight gain remain adequate, confirming that he is getting enough. As you decrease the supplement, the baby will remove a bit more milk, and will gradually increase your rate of production.
- 3. A day or two after you reach the point of offering less than a half ounce (15 ml) of supplement before each breastfeeding, you can probably eliminate the supplement completely. At that point the baby may want to breastfeed a little more often at first, to build your rate of production by that last little bit, but usually for only a day or two.

ⁱ Daly, S., Kent, J., Huynh, D., et al. The determination of short-term breast volume changes and the rate of synthesis of human milk using computerized breast measurement. *Exp Physiol* 1992; 77: 79-87.