

## Rethinking Swaddling

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Nancy Mohrbacher in Mothers Need to Know, Swaddling, Useful Breastfeeding Research

There's no doubt that babies seem calmer and sleep more when swaddled. But is this a positive or a negative? The research provides some surprising answers, starting with the first days after birth.

**Swaddled babies arouse less and sleep longer.**<sup>1</sup> That may sound good, but in the early hours and days after birth this can lead to less breastfeeding, which is associated with greater weight loss, more jaundice, and a delay in milk production.<sup>2</sup>

**Swaddling delays the first breastfeeding and leads to less effective suckling.** In a study of 21 babies after a vaginal birth,<sup>3</sup> researchers divided them into two groups. One group was



laid skin-to-skin on mother's body, examined briefly, then returned to skin-to-skin contact for two hours. The other group was shown to the mother, examined, and swaddled with hands free and then returned to mother. The swaddled group showed delayed feeding behaviors, suckled less competently at their first breastfeeding, and established effective breastfeeding later.

When swaddling is added to other newborn stressors, it appears to worsen their negative effects. Researchers compared outcomes among 176 mothers and babies, who were divided into 4 groups:

1. Kept in skin-to-skin contact with mother for 30 to 120 minutes after birth
2. Held in mother's arms wearing clothes
3. Separated from mother at birth and returned to her after two hours
4. Taken to the hospital nursery at birth and returned to mother for breastfeeding seven times each day at regular intervals

In each group, some babies were swaddled and some wore clothes. The researchers reported that skin-to-skin contact reduced "the stress of being born" and found the babies kept skin-to-skin after birth had the highest body temperatures.<sup>4</sup>

**Swaddled babies separated during their first two hours lost more weight.** Among the babies in Group 3 above, the swaddled babies had a significantly greater weight loss on their

third and fifth days.<sup>5</sup>

**Swaddled babies kept in the nursery were colder and consumed less milk.** Among the babies in Group 4 above, those who were swaddled had the lowest foot temperature of any of the babies in any of the study groups. Newborns who were both separated and swaddled consumed less mother's milk overall than those who were separated but not swaddled. Their mothers also produced less milk on the fourth day and they had a shorter duration of breastfeeding overall.<sup>5</sup>

**Swaddled babies in the nursery lost more weight despite consuming more formula.**<sup>5</sup>

Possible reasons for this that the researchers suggested include:

- Severely limiting baby's movements is stressful, which burns more calories.
- Swaddled babies receive less touch, which can compromise growth in preterm babies.<sup>6</sup>

If there are reasons to be concerned about a newborn's temperature, a more effective strategy than either swaddling or using an infant warmer is to keep baby on mother's body, putting blankets over both mother and baby.<sup>7,8,9</sup> If the mother can't provide skin-to-skin contact, the father is an excellent second choice.

**But what about after hospital discharge?** Once a baby is breastfeeding well, is there any reason to avoid swaddling? While swaddling may be helpful when used occasionally, routine swaddling during the first months associated with greater risk of:

- Respiratory illness<sup>10</sup>
- Hip dysplasia<sup>11</sup>
- SIDS in prone sleeping positions<sup>12</sup>
- Overheating<sup>13</sup>

Evidence is also growing that babies' hand movements aid them in finding the breast and latching.<sup>14</sup> Swaddling during breastfeeding to restrict babies' hands may contribute to breastfeeding problems.

After reading the research, my own opinion of swaddling has changed. In most cases a mother's body is her newborn's best "baby warmer." When babies get fussy, it may be best to limit swaddling and suggest instead parents consider alternatives, such as skin-to-skin contact and baby carriers.

*For a more detailed look at this subject, click [here](#) to read "Rethinking Swaddling," my lead article in the September 2010 issue of the **International Journal of Childbirth Education**.*

## References

<sup>1</sup>Franco, P., et al. [Influence of swaddling on sleep and arousal characteristics of healthy](#)