Dummies - the research

The potential role of dummies, pacifiers or soothers in reducing the risk of sudden infant death syndrome (SIDS) has been the subject of investigation for several decades. However, the mechanism underlying this association remains uncertain, and the use of dummies continues to generate debate about the broader implications for infant feeding and development.

It was first suggested in the 1970s that dummy use might confer a protective effect against SIDS[1]. Multiple observational studies have since demonstrated that SIDS infants were less likely to have used a dummy during their final sleep compared with control infants.
Two subsequent meta-analyses, incorporating studies conducted across diverse populations in New Zealand, the Netherlands, the United Kingdom, Ireland, Germany, Scandinavia, and the United States, found that dummy use was associated with halving the risk of SIDS[2,3].

Further investigations in Ireland and Britain identified a small association between inconsistent dummy use and an increased risk of SIDS. Specifically, infants who habitually used a dummy but did not use it during their final sleep appeared to exhibit a higher risk[4,5]. These findings suggest that either consistent use across all sleep periods is essential to confer a protective effect, or alternatively, that non-use during a final sleep may reflect an unmeasured disruption in routine, thereby serving as a proxy indicator for other SIDS risk factors[6].

Despite the consistency of the association, no definitive causal mechanism has been established. One study reported that dummy sucking increased airway size in a single infant, potentially enhancing airway patency[7]. However, this finding is limited in scope and generalisability, particularly given that many infants lose their dummy shortly after falling asleep[8]. Additional studies have examined the effects of dummy use on infant autonomic control and arousability, factors that are considered relevant to SIDS vulnerability. While some research has identified significant physiological differences[9], other investigations yielded inconclusive results[10–13].

Concerns regarding the potential adverse effects of dummy use have also been raised, particularly in relation to breastfeeding, which itself provides a protective effect against SIDS. Early observational studies suggested that dummy use was associated with shorter breastfeeding duration and reduced frequency[14].
However, subsequent meta-analyses of randomized controlled trials found no significant difference in breastfeeding outcomes when dummies were introduced after successful establishment of breastfeeding, typically after four weeks, in mothers who were highly motivated to continue breastfeeding for at least three months[15].
These findings suggest that dummy use, when appropriately timed, does not impact on breastfeeding success.

Another concern is that dummies have been associated with an increased risk of otitis media, a common infection of the middle ear, which can be caused by viruses or bacteria. However, research indicates that this risk can be effectively mitigated by

limiting dummy use to sleep periods and discontinuing its use at approximately six months of age[16,17]. Additionally, some researchers have proposed that extended dummy use could contribute to speech delays by interfering with oral motor development or reducing opportunities for vocal practice. However, recent research from the United Kingdom found no significant association between dummy use and speech delay[18].

Dummy use has been associated with several developmental and clinical benefits. Dummies provide comfort and self-soothing for infants and have been shown to reduce procedural pain during medical interventions[19]. Furthermore, in preterm infants, dummy use has been linked with shorter hospital stays and improved feeding coordination, without significantly affecting breastfeeding outcomes[20].

References

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Frequently asked questions

What does the research show?

Researchers have studied whether dummies (pacifiers/soothers) help reduce the risk of SIDS over five decades. Many observational studies show that babies who died of SIDS were less likely to have used a dummy during their last sleep, and large reviews from several countries found that dummy use was linked with about half the risk of SIDS. Some studies also noted that babies who usually used a dummy but did not use it during their final sleep had a slightly higher risk, possibly because consistent use has an impact on SIDS risk, or because the change in the use of a dummy signals another issue the infant had, which was linked to SIDS.

The reasons dummy use might reduce SIDS risk are still unclear. Research has explored whether dummies affect the airway or a baby's ability to wake, but results have been limited or mixed. There were concerns that dummy use may interfere with breastfeeding, cause ear infections, or delay speech. However, randomized trials found no impact when dummies were introduced after breastfeeding was well established. Ear infection risk can be reduced by limiting dummy use to sleep and

stopping around six months, and recent research found no link with speech delay. Dummies may also provide other benefits, including comfort, reduced pain during medical procedures, and reduce hospital stays for preterm infants.

Why does using a dummy reduce the risk of SIDS?

We don't yet know exactly what it is about a dummy that lowers the risk of a baby dying SIDS.

Does my baby need to use a dummy every day?

Yes. If you're using a dummy, it's best to offer it for every sleep, day or night, not just some sleeps. If the dummy falls out of your baby's mouth during sleep, there's no need to put it back in.

Will a dummy make breastfeeding more difficult?

If you choose to use a dummy, only introduce it once breastfeeding has been established. The time this takes differs for everyone, but it could be a few weeks. Make sure you get help if you need it. Once you have established breastfeeding, introducing a dummy shouldn't make it more difficult.

What if my paediatrician recommends a dummy, but I have not properly established breastfeeding with my baby?

There are some situations where medical professionals suggest using dummies before breastfeeding has been established.

For example:

- To comfort babies when they are having procedures or on ventilators.
- To help premature babies develop facial muscles while they learn to suck.
- For babies receiving a kind of ventilation called CPAP, to help keep their mouths closed and maintain pressure in their airways.

We recommend following your health professional's advice in these situations.

What if my baby won't take a dummy?

Not all babies like dummies. If your baby keeps refusing a dummy, don't force them to take it. Remember, following other safer sleep advice such as not smoking and placing your baby to sleep on their back, in their own sleep space, will all help lower their risk of SIDS.

What is the key takeaway for families?

Using a dummy once feeding has been established reduces the risk of SIDS. Dummies can also have other health benefits to some infants. Dummies can be removed around 6 months old.