

Breastfeeding - the research

Breastfeeding, chest feeding, or the provision of expressed milk has been investigated in relation to sudden infant death syndrome (SIDS) since the 1960s. Early studies reported a higher risk of SIDS in infants who were formula fed¹ and this association has been replicated over subsequent decades. A meta-analysis of 23 studies conducted between 1965 and 1997 found a two-fold increase in SIDS risk among formula-fed infants². Later analyses that adjusted for confounding factors such as infant sleep position confirmed a protective association between breastfeeding and reduced SIDS risk³. The most recent analysis demonstrated that infants who received any breast milk for any duration had approximately half the risk of SIDS compared with exclusively formula-fed infants⁴.



Studies have also compared exclusive breastfeeding with mixed feeding infants with a combination of breast and formula milk. While any breastfeeding was found to be protective compared with exclusive formula feeding, evidence remains insufficient to conclude whether exclusive breastfeeding provides additional protection beyond mixed feeding^{4,5}.

The mechanisms by which breastfeeding reduces SIDS risk are not fully understood. One study found that breastfed infants were more easily roused from sleep compared to formula-fed infants⁶ which may lower vulnerability during sleep. Additional explanations suggest that the overall health benefits of breastmilk may also play a role. Breastfeeding has been shown to reduce the risk of infections such as otitis media and gastrointestinal illness, as well as necrotising enterocolitis in preterm infants. Longer-term benefits include reduced risks of certain autoimmune conditions and metabolic diseases.

Infants are advised to sleep in the same room as their caregivers for at least the first six months. Room-sharing has been linked with a lower risk of SIDS and is also associated with higher rates of breastfeeding⁷, combining two protective factors.

Nicotine is known to pass into breastmilk, raising concerns that breastfeeding might increase an infant's exposure. However, an autopsy study found no significant difference in levels between breastfed and bottle-fed SIDS infants⁸. This indicates that breastfeeding does not increase an infant's exposure to smoke.

References

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Frequently asked questions

What does the research show?

Research over many years has shown that babies who receive breast milk have a lower risk of SIDS than those who are formula fed. Large, combined analyses show that infants who receive any breast milk have about half the risk of exclusively formula-fed infants. Any breastfeeding reduces the risk of SIDS and there is not enough evidence to know whether exclusive breastfeeding offers more protection than mixed feeding. Although the reasons why breastfeeding lowers SIDS risk are not fully understood, one study found that breastfed babies wake more easily. Breastmilk is also known to support overall infant health.

Does formula feeding increase the risk of SIDS?

It has been shown that partial or combination feeding (breast milk and formula) and exclusive breastfeeding have been associated with lower SIDS rates. Thankfully, SIDS is now very rare. If you exclusively formula-feed your baby and follow all the other safer sleep advice, then the risk of SIDS is extremely low.

Why does breastfeeding reduce the risk of SIDS?

It is not known exactly why, but the research is clear that breast feeding reduces the risk of SIDS.

Is it safe to breastfeed if I smoke?

Breastfeeding has many benefits and is the best way to feed your baby regardless of whether you smoke or not. We encourage all parents breastfeed even if you smoke, but smoking has its own risks for you and your baby.

What is the key takeaway for families?

Babies having breastmilk, either exclusively or mixed feeding, reduces the risk of SIDS, as well as providing protection against illness. Breastmilk is protective whether it is given through breast- or chest- feeding or expressed and given another way.