THEORY OF CHANGE

UNICEF UK Baby Friendly Initiative

April 2025

UNICEF.org.uk

United Kingdom Committee for UNICEF (UNICEF UK),
Registered Charity No. 1072612 (England & Wales), SC043677
(Scotland). 1 Westfield Ave, London E20 1HZ.

The Baby Friendly Initiative
UNITED KINGDOM
unicef

UNICEF UK
BABY FRIENDLY INITIATIVE

THEORY OF CHANGE

Introduced to the UK in 1994, the **UK Committee for UNICEF (UNICEF UK) Baby Friendly Initiative** has worked with public services for 30 years to support families with infant feeding and developing close and loving relationships so that *all* babies get the best possible start in life. The programme supports maternity, neonatal, community and hospital-based children's services to transform their care and with universities to ensure that newly qualified midwives and health visitors have the strong foundation of knowledge needed to support families. The Baby Friendly accreditation programme has been recognised and recommended in numerous government and policy documents across all four UK nations [1], resulting in the significant expansion in the number of services that have achieved or are working towards accreditation.

Our Theory of Change is informed by extensive consultation with internal and external stakeholders and explains how the UNICEF UK Baby Friendly Initiative achieves change for babies and children. It provides a significant update to the Theory of Change published in 2017, reflecting the programme's evolving scope and scale within the UK. This version links more strongly with the United Nations Convention on the Rights of the Child (UNCRC) and offers detailed insights into how impact is achieved for babies, their mothers, parents/primary caregivers and families. It also more clearly embeds the International Code of Marketing of Breastmilk Substitutes (the Code) and its contribution to change.

Image: Mother, Sajanthini, shares a loving gaze with her six-month-old son, Aaron, who is receiving care at the Alder Hey Children's Hospital in Liverpool.

CONTEXT

Global

The Baby Friendly Hospital Initiative (BFHI) is a global programme launched by the World Health Organization and UNICEF in 1991 in response to a worldwide decline in breastfeeding rates. Currently adopted by more than 150 countries, the programme works with healthcare facilities to implement an evidence-based change management framework designed to promote infant and maternal health with a focus on breastfeeding in maternity settings. The framework is often referred to as the 'Ten Steps to Successful Breastfeeding'.

The Baby Friendly programme is guided by the United Nations Convention on the Rights of the Child (UNCRC), a legally binding international human rights treaty which outlines the fundamental rights of every child. Under Article 24, states must fulfil obligations to progress children's right to health, including by means of promoting breastfeeding and by ensuring the provision of accurate health information. The Committee on the Rights of the Child has recognised the International Code of Marketing of Breastmilk Substitutes (the Code) as an appropriate measure that states are obliged to take to fulfil their obligations under the UNCRC.

The Code is an international human rights framework adopted by the World Health Assembly in 1981 which promotes breastfeeding and regulates the inappropriate marketing of breastmilk substitutes so that *all* families can make informed feeding choices free from commercial influences [3]. The underlying basis for the Code is the recognition that the health of babies is so important that the usual rules governing market competition and advertising should not apply to products intended for feeding babies.

National

In the UK, the Baby Friendly Initiative is one of three programmes delivered by UNICEF UK, alongside the Rights Respecting Schools Award and Child Friendly Cities and Communities. These programmes work in partnership with UK public services to influence and support the transformation of systems and services across health, education and local communities to achieve change for babies and children. This work supports UNICEF UK's strategic outcomes to champion child rights in the UK and around the world and to elevate the voices of children and to support their active participation.

The UNICEF UK Baby Friendly Initiative provides a staged accreditation process aligned with a set of interlinking and evidence-based standards for maternity, neonatal, community and hospital-based children's services and universities, providing a roadmap for transforming care.

Services implement the standards in stages over a number of years and are externally assessed at each stage by UNICEF UK. When all stages are passed, the service is accredited as Baby Friendly and may go on to pursue the Achieving Sustainability Gold Award. Services which are starting on the accreditation process are now encouraged to implement the Achieving Sustainability standards at the outset to ensure a strong foundation for supporting change and ongoing maintenance of the core standards in the long term.

Baby Friendly is a universally applied programme that aims to reach *all* families. Accredited services must consider the specific needs and characteristics of their local populations and communities when implementing the standards.

A key intention of the UNICEF UK Baby Friendly Initiative is to raise standards of care for *all* babies by ensuring that services and staff are equipped to provide families with evidence-based support and information that will enable them to make informed choices about feeding and caring for their baby. This work is based on the extensive evidence of the benefits of breastmilk and breastfeeding for infant and maternal health and is underpinned by the World Health Organization recommendation of exclusive breastfeeding for the first six months of life and up to two years and beyond alongside complementary foods [4].

The UK has some of the lowest breastfeeding rates in Europe [5]. Breastfeeding rates in the UK further vary significantly by region, ethnicity and socio-economic status [6] and whilst most mothers in the UK initiate breastfeeding, the duration of breastfeeding declines significantly over time [7]. However, there is evidence that gaps are closing and breastfeeding rates are gradually increasing [8]. These improvements are welcome and coincide with a more strategic and systematic approach to breastfeeding, including the introduction of national infant feeding strategies and the endorsement and implementation of the UNICEF UK Baby Friendly Initiative as a key element of these strategies. Despite these promising improvements, further action is required to ensure that *all* families receive the support they need to continue breastfeeding for as long as they wish.

The Baby Friendly programme also supports families who are bottle feeding by providing guidance and information on safer preparation of infant formula and responsive bottle feeding. In addition, the programme aims to promote close and loving relationships between parents/primary caregivers and babies, recognising how interactions during feeding play a key role in relationship building. Services engaged in the Baby Friendly programme work to ensure that parents/primary caregivers can stay close with their baby and that staff have the knowledge, skills and competence to encourage and support early, secure attachment and responsive, close and loving relationships.

Image: Mother, Jenny, spends a sunny afternoon at a community event in Stockwood Park with her nine-month-old son, Theo. The event is run by the local Bedfordshire Community Health 0-19 service which has been engaged in the Baby Friendly programme since 2009 and most recently gained Achieving Sustainability 'Gold' re-validation in 2023.

UNDERSTANDING CHANGE IN SERVICES ENGAGED IN THE BABY FRIENDLY PROGRAMME

Enabling change

Our Theory of Change outlines the core activities we undertake to enable transformational change in systems, culture and staff knowledge to support infant feeding and close and loving relationships. These activities help build capacity (**OUTPUTS**) within services, which in turn translates into changes in performance (**OUTCOMES**) and results in change for babies, their mothers, parents/primary caregivers and families (**IMPACT**). Core activities include:

- Providing an external assessment and quality assurance system that monitors and audits progress.
- Offering a comprehensive education and training framework to enable the effective implementation of an evidence-based approach that incorporates best practice in leadership, implementation of the standards, and which ensures that staff have the knowledge, skills and competence to transform healthcare and early years services for babies, their mothers, parents/primary caregivers and families.
- Monitoring and evaluation systems and tools designed to enable continuous improvement and to support services to systematically monitor data and apply data-driven approaches to implementation.
- Raising awareness of the UNCRC to ensure a child rights focus underpins policy and practice related to the care of babies.
- Advocating for full implementation of the Code across the four nations of the UK and developing and providing Code-compliant and evidence-based information and resources.
- Building communities of practice to enable peer learning and sustained evidence-based approaches for effective infant feeding and early childhood development.
- Curating and delivering an annual conference which has grown to become the largest on infant feeding and relationship building in Europe.

Facilitating change

The starting point for achieving change is through a process of capacity building, both at service level and for staff. This process ensures that leadership at all levels understand how to implement the Baby Friendly standards, the benefits of doing so, and the cultural shift required to realise transformative change.

Capacity building is embedded through the formulation and implementation of relevant policies, structures and systems of governance. This includes the design and delivery of training programmes to facilitate the development of a skilled and

supportive workforce that has the requisite knowledge, skills and competence to effectively implement the Baby Friendly standards. Increased staff knowledge ensures that families are supported to understand how to access evidence-based resources and information about feeding and caring for their baby, the benefits of breastfeeding and human milk, early secure attachment, responsive close and loving relationships, skin-to-skin contact and are supported to be partners in the care of their sick or premature baby.

Transforming practice

Changes in capacity translate into changes in performance for staff and services, supporting improved outcomes for babies, their mothers, parents/primary caregivers and families. There will be a cultural shift as staff embrace new ways of supporting families to feed and care for their baby. Settings may look and feel different as they are re-organised and co-designed to support implementation of the Baby Friendly standards. Staff will provide personalised support around infant feeding and responsive, close and loving relationships and parents/primary caregivers will feel supported to make informed decisions about feeding and caring for their baby, with their views respected. All babies will be supported to be fed in a safer and responsive way. Those who want to breastfeed will be supported to initiate and maintain breastfeeding for as long as they choose. More babies will receive human milk, be breastfed, breastfeed for longer and enjoy responsive, close, and loving relationships with their parents/primary caregivers.

Image: Seven-day-old Emilia engages in a special moment of skin-to-skin with father, Dan, whilst receiving care at the Alder Hey Children's Hospital in Liverpool.

Reading our Theory of Change diagram

The Theory of Change diagram visually communicates our vision for change in a Baby Friendly accredited service. It is closely aligned, to but does not directly mirror, the Baby Friendly accreditation framework.

The diagram should be read from left to right. The first level of changes on the left of the diagram relate to **outputs** the programme intends to achieve by building capacity for staff and services in Baby Friendly accredited settings.

The middle column shows changes in **outcomes**. These are changes in performance that occur when the Baby Friendly standards are firmly embedded. The outputs and outcomes are colour coded to demarcate change.

The final column shows the **impact** for babies and children, their mothers and parents/primary caregivers.

The adjacent page includes a list of **activities**, a more detailed description of the Code, and the articles included in the UNCRC most relevant to the work of the UNICEF UK Baby Friendly Initiative.

The Theory of Change uses UNICEF definitions for outputs, outcomes, and impact from the Results Based Management Handbook: Working Together for Children (UNICEF 2017).

IMPACT: WHAT DOES THE EVIDENCE TELL US?

Overview

This section summarises available evidence around the impact of the Baby Friendly Initiative ('BFI') and the Baby Friendly Hospital Initiative ('BFHI') for babies, their mothers, parents/primary caregivers and families [9]. It also reviews wider evidence on the programme's core components, i.e. breastfeeding, safe and responsive feeding, and close and loving relationships. The evidence supports the tangible changes in Baby Friendly accredited settings and the impacts that this can contribute to.

The Baby Friendly Initiative is an evidence-based programme and the evidence underpinning it is evolving. We are proactively working to develop the evidence base for the programme through in-house and external research opportunities. In 2024 we commissioned an academic partner to undertake a thorough evidence review of the standards and conduct an impact study to explore how mothers and parents/primary caregivers experience care in Baby Friendly accredited settings.

Effective interventions for supporting and protecting breastfeeding

Evidence confirms that BFHI is an effective intervention for supporting breastfeeding. For example, a *Lancet* analysis of 28 systematic reviews and meta-analyses demonstrates that BFHI is highly effective in improving breastfeeding practices [10]. Implementation of BFHI is positively associated with a range of breastfeeding outcomes, including higher rates of exclusive breastfeeding, improved early breastfeeding initiation, increased breastfeeding duration [11] [12] and sustained impact on continued breastfeeding [13].

Mothers in BFHI-accredited hospitals have been found to be more likely to achieve their individual breastfeeding goals [14]. In addition, the positive impact of the BFHI on breastfeeding rates has been found to be stronger among low-birthweight neonates who are less often breastfed due to a number of factors, reducing the breastfeeding gap for this vulnerable group [15].

Evidence supports the link between the implementation of BFI and increased UK breastfeeding rates. One systematic review indicates that the implementation of BFI in the UK is associated with increased breastfeeding rates at 6-8 weeks, whilst acknowledging the lack of evidence on the long-term impact on breastfeeding outcomes of the programme. Notably, this review analysed data from 2002-2015, and therefore did not capture substantial modifications to the

BFI UK standards introduced in 2012 which were expanded to include enhanced staff communication skills, responsive feeding, supporting all parents/primary caregivers regardless of feeding method to build close and loving relationships with their baby, and enhanced support for formula feeding.

In addition, there is evidence that as governments adopt a more strategic approach to infant feeding – including the introduction of national infant feeding strategies and the recognition, support and promotion of the BFI programme across the four nations of the UK – breastfeeding rates are increasing. For example, Public Health Scotland reports that over the past 10 years, the proportion of babies receiving some breastfeeds has increased at both first visit (59%) and at 6-8-week reviews (49%) in 2023/24 compared to 48% and 37% in 2013/14, respectively [16]. In Northern Ireland, compared to 10% of babies born in 2012, 22% of babies born in 2021 were receiving breastmilk (either totally or partially) at six months after birth [17]. Similarly, the prevalence of breastfeeding at 6-8 weeks in England increased from 49% in 2023 to 53% in 2024 – the highest prevalence of breastfeeding since 2015 to 2016 (43% [18]) [19].

Another core component of BFHI and BFI is to actively promote the implementation of the International Code of Marketing of Breastmilk Substitutes ('the Code'). A study exploring the link between the implementation of the Code and exclusive breastfeeding shows that, in combination with other enabling factors, the programme is recognised as a necessary step to improve breastfeeding outcomes [20]. In a UK study, health visitors and infant feeding leads in BFI-accredited services reported that BFI is particularly effective in reducing their contact with the commercial milk formula industry, increasing staff awareness of the ethics of engaging with this industry, and supporting mothers to make informed decisions about feeding their baby [21].

BFI contributes to improving breastfeeding rates through increasing awareness, skills and knowledge of the healthcare workforce. One study indicates significant improvements in health visitors' and nursery nurses' breastfeeding attitudes, knowledge, self-efficacy and appropriate management of breastfeeding problems after attending BFI training [22]. The BFI standards have been shown to enhance infant feeding care provision and experiences by offering staff and service users information, resources and emotional support, together with effective, local leadership and a team approach [23].

At an organisational level, BFI can be seen as a driver of change through the cyclical and iterative approach of reaccreditation [24]. The implementation of BFI ensures that breastfeeding standards remain a high priority within the organisation by providing a level of accountability to challenge poor or inconsistent practices and by fostering a more supportive breastfeeding environment, including in neonatal intensive care settings [25].

The benefits of human milk and breastfeeding

The benefits of human milk, breastfeeding and particularly sustained breastfeeding for infant and child health outcomes are well established. Through its nutrients and bioactive factors [26], human milk protects infants against severe infections including enterocolitis, diarrhoea, and pneumonia, and is linked to reduced rates of infant morbidity and mortality [27]. Compared to infant formula, breastfeeding promotes a healthier, more diverse microbial ecosystem that offers protective health benefits including stimulating antibody production, enhancing the immune system, and preventing autoimmune and allergic diseases [28]. There is also evidence that breastfeeding has a positive impact in the maturation of the infant gut microbiome [29]. Specifically, a 12-month longitudinal study indicates that bacterial diversity and composition changes are positively associated with the proportion of daily breastmilk intake in a dose-dependent manner, even after the introduction of solid foods [29].

A study of the Scottish birth cohort (1997-2009) observes a lower risk of hospitalisation among infants exclusively breastfed at 6-8 weeks compared to those fed with infant formula across a range of childhood illnesses including gastrointestinal, respiratory and urinary tract infections, otitis media, fever, asthma, diabetes, and dental caries [30]. This finding is reinforced by the analysis of the UK 2010 Infant Feeding Survey which reveals that any breastfeeding for at least three months is protective against hospital admission for infectious causes, and particularly respiratory tract infection, with effects greater in infants who are exclusively breastfed for a prolonged period of at least six weeks [31].

There is also evidence suggesting that continued breastfeeding during maternal or child hospitalisation offers protection and aids recovery, especially from critical illness [32]. In the long term, breastfeeding has been shown to protect children across their lifetime from a vast range of serious illnesses including obesity [33], heart disease, diabetes, and childhood leukaemia [34]. Worldwide, an estimated 823,000 deaths in children under five could be prevented by improving breastfeeding practices [27].

Breastfeeding has consistently been shown to have a positive impact on children's cognitive health and brain development [35]. Imaging studies indicate improved development in the brain regions linked to language, social-emotional functioning and cognition in breastfed infants [36]. Breastfeeding is further associated with improved cognitive function in early and later childhood [37] [38] [39]. Findings from the UK Millennium Cohort Study indicate that longer breastfeeding durations are associated with higher cognitive scores at all ages up to 14 years [40]. Some studies have also identified a link between the long-term benefits of breastfeeding and improved educational outcomes [41]. Breastfeeding also results in specific physical and social interactions that support

the development of socio-emotional neural pathways [42]. Specifically, breastfeeding promotes the release of oxytocin, facilitating bonding and emotional regulation, thereby positively influencing brain development.

Emerging literature suggests some benefits of breastfeeding on child dental outcomes. In particular, breastfeeding has been linked to reduction in malocclusions [27]. One review identifies extended breastfeeding as a protective factor for dental caries under one year of age [43].

By improving the rate of breastfeeding and its related outcomes, BFI contributes to reducing health inequality gaps between babies and children from different social groups [44]. Consistent data on the implementation of BFHI has shown that the programme positively addresses racial gaps in breastfeeding initiation and duration, and hence related health outcomes [45] [46]. For example, breastfeeding beyond six months is associated with the prevention of rapid weight gain, a precursor of obesity, among infants from low-income, racially, and ethnically diverse backgrounds, suggesting progress toward health equity [47].

A cost-analysis of the impact of infant feeding choices on healthcare service costs using the Scottish birth cohort between 1997 and 2009 dataset shows that breastfed infants in the most deprived areas have lower average healthcare costs compared to infants who are fed with formula living in any area, regardless of the level of deprivation [48]. This study estimates that at least £10 million of healthcare costs may have been avoided if infants who are fed with formula had been exclusively breastfed within the first 6-8 weeks of birth [48]. These findings highlight how breastmilk can promote equitable child health by significantly reducing childhood illness and healthcare utilisation.

In line with this, Public Health Scotland shows that increases in breastfeeding over the past 10 years have been greatest among those groups with historically lower rates – such as younger mothers and those living in more deprived areas – highlighting how inequalities in breastfeeding have reduced over time [16].

Responsive feeding

The BFI programme promotes responsive feeding for all babies. Responsive feeding refers to feeding approaches and practices that are infant-led and responsive to infant cues [49]. Caregivers who responsively feed are attentive to their infant's signals of hunger and satiety, engage in paced feeding and are aware of the social interactions and opportunities during feeding in response to infant cues [49]. There is some evidence indicating the role of responsive feeding in the development of healthy weight gain trajectories and eating patterns during early infancy and later throughout the child's life [50] [51], which in turn are powerful predictors of long-term health outcomes such as obesity, diabetes, cardiovascular disease and some types of cancers [52].

Responsive breastfeeding

Responsive breastfeeding embraces the many and varied reasons a mother may offer the breast aside from meeting the infant's nutritional requirements and describes a sensitive, reciprocal relationship where the physical, social and emotional needs of the dyad can be met through a shared behaviour. One systematic review identifies a significant association between breastfeeding and maternal responsiveness, including aspects such as sensitivity, mutuality, synchrony, emotional support, positive attitude and responsive stimulation [53]. In the same review, longitudinal studies show that longer breastfeeding duration predicts greater use of responsive feeding and parenting practices (e.g. lower levels of restrictions, less pressure to eat) during later childhood [53].

Longitudinal evidence further supports breastfeeding (compared with mixed feeding and formula feeding) and longer duration of breastfeeding of six months and more (compared with less than six months) as associated with more favourable growth trajectories in early childhood [54]. In addition, analysis of specific feeding practices suggests direct feeding at the breast has a stronger beneficial effect compared with feeding expressed breastmilk, although expressed breastmilk remains beneficial compared with infant formula [55]. Whilst not the same, responsive feeding practices (e.g. not overfeeding) and its-related outcomes can also be encouraged in bottle feeding [56].

Responsive bottle feeding

The programme also supports parents/primary caregivers who bottle feed expressed breastmilk or infant formula to do so responsively and as safely as possible. Staff in BFI accredited settings complete practical skills training in responsive bottle feeding aimed at supporting caregivers to adopt a responsive approach that includes paced feeding, allowing the baby to take more control over the feeding experience and for the caregiver to recognise fullness cues.

Parents and primary caregivers are also encouraged to use feeding as a time to establish responsive, close and loving relationships by giving most of the feeds themselves, engaging with their baby and reading their cues. For parents/primary caregivers who formula feed, there is an emphasis on supporting them to understand how to prepare feeds as safely as possible to reduce risk of infection, including diarrhoea and vomiting [57] and to use a first stage milk.

There is a small but growing literature on the efficacy of this approach. One study found that mothers using paced bottle feeding are less likely to encourage their baby to empty the contents of their bottle [58]. Another study found that paced bottle feeding results in slower feeding rates, extended meal durations and greater maternal sensitivity to infant cues compared to typical bottle feeding, but not a reduction in food intake [59].

Early secure attachment and responsive, close, and loving relationships

Through key elements of BFI practices such as supporting responsive, close, and loving relationships, skin-to-skin contact [60] and breastfeeding [61], the programme fosters the formation of early secure attachment, which is crucial to a child's emotional [62] and psychological development [63]. For example, skin-to-skin contact immediately after birth facilitates bonding by promoting oxytocin release [64] which strengthens the emotional connection between the mother and infant and fosters early secure attachment [60]. The same effect is observed in preterm infants, who are often more likely to have difficulty forming secure attachment with their mothers compared to full-term infants [65].

Similarly, breastfeeding offers opportunities for physical and emotional connections for mothers and infants, which contributes positively to the formation of secure attachment and responsive, close, and loving relationships [61]. Further evidence indicates that longer duration of breastfeeding is positively associated with maternal sensitivity and attachment security, regardless of family and maternal background [66] [67].

Research on BFHI has shown that implementation of the programme is associated with an increase in these key indicators. For example, a study evaluating the BFHI programme within 25 hospital teams across Canada shows that all skin-to-skin indicators had improved, with rates of immediate and sustained skin-to-skin meeting targets of >80% for vaginal births [68]. Similarly, a group comparison between mothers in BFHI-accredited hospitals and those in non-BFHI-accredited hospitals in Italy shows that the former have significantly higher rates of skin-to-skin contact between mother and child [69].

By promoting secure attachment and close and loving relationships between infants and their parents/primary caregivers, BFI contributes to improved health outcomes for all babies and children. Extensive evidence on early secure attachment supports its positive impact on children's social and emotional development across their lifetime. Recent literature includes reviews identifying secure attachment as a core feature of resilience [70], linking it to improved emotion regulation [71], improved adaptive functioning domains such as social competence and executive function [72], lower rates of mental health issues (e.g. anxiety [73] and depression [74]) and improved wellbeing [101] [102].

Such aspects of BFI have also been shown to positively impact physical health outcomes for babies and children. Specifically, research suggest that babies receiving early skin-to-skin contact displayed higher blood sugar levels, reducing the risk of neonatal hypoglycaemia [75] [76]. In the absence of mother-infant skin-to-skin (i.e. during the unavailability of mothers due to special circumstances,

including medical emergencies and caesarean section), skin-to-skin between infants and fathers has also been shown to be a valuable alternative, providing health benefits for both [77]. Both immediate and early skin-to-skin contact have been found to promote exclusive breastfeeding [78], and thus its related outcomes for infants and their mothers.

Improved outcomes for preterm babies

The BFI neonatal standards provide a roadmap for services to transform care for preterm babies by supporting parents/primary caregivers to develop a close and loving relationship with their baby, engage in skin-to-skin contact, enable babies to receive breastmilk and to be breastfed where possible, and by valuing parents as partners in their baby's care. For preterm infants, skin-to-skin has been reported to decrease pain response during the hospital stay [79], improve sleep patterns [80] and improve brain maturation [81]. A review of medical records of very preterm infants report that those who experience more skin-to-skin during hospitalisation score higher on 12-month neurodevelopmental assessments [82].

For preterm babies who are breastfed, the implementation of BFI in neonatal wards has resulted in significant improvements in breastfeeding-related care practices and more frequent, immediate and uninterrupted skin-to-skin contact between infants and mothers [25]. Research indicates that the risk of neonatal mortality increases with increased delay in breastfeeding initiation [83]. Specifically, infants who initiate breastfeeding between 2–23 hours after birth have a 33% greater risk of neonatal mortality compared to those who initiate breastfeeding within one hour of birth [83]. Neonatal mortality risk is more than 100% greater in infants who initiate breastfeeding over 24 hours after birth [83].

Human milk significantly reduces the chances of severe medical complications in preterm infants [84] [85]. Medium to high levels of breastmilk feeding contribute positively to motor and behavioural neurological development in extremely preterm infants [86].

Improved outcomes for mothers, parents and primary caregivers

The implementation of BFI contributes to increased breastfeeding rates for mothers and improved responsive, close, and loving relationships – irrespective of how a baby is fed – that in turn translate into positive impacts on mothers who breastfeed as well as parents/primary caregivers.

Breastfeeding is linked to mothers' improved physical health outcomes. Globally, up to 20,000 deaths a year from breast cancer could be prevented by improving breastfeeding practices [27]. A large meta-analysis of 47 studies from 30

countries reports a decrease of around 4% in the relative risk of breast cancer for every 12 months of breastfeeding, which is in addition to the 7% decrease in risk observed for each birth [87]. Findings are consistent across low- and high-income countries and do not vary with age, menopausal status, ethnic group, or age at first birth, indicating the universality of the effect [87]. Furthermore, one study shows that breastfeeding for over 12 months is associated with a reduced risk of ovarian cancer and type 2 diabetes, by 37% and 32% respectively [88]. Analysis of 8 studies and more than one million parous women show that breastfeeding is associated with a reduced maternal cardiovascular risk [89]. Findings indicate a progressive reduction of cardiovascular risk with lifetime durations of breastfeeding from 0 up to 12 months [89].

There is an interrelationship between breastfeeding, mental health and the emotional wellbeing of mothers. Research shows that if a mother wants to breastfeed, meeting their feeding goals can be protective of mental health, and where mental health is a challenge, breastfeeding can be protective of the mother-baby relationship [103]. Breastfeeding is associated with fewer symptoms of postpartum depression and anxiety [90]. Exclusive breastfeeding has also been found to increase the mother's self-efficacy and provides protection from symptoms of postpartum depression [91]. For mothers who are struggling with their mental health, the sense of achievement obtained by successful breastfeeding can boost their self-esteem [92].

Breastfeeding further reinforces the mother-infant relationship and reduces fatigue in the mother by promoting an effective sleep-wake cycle [91]. Research has also discovered that postpartum depression is associated with early breastfeeding cessation [93]. A separate longitudinal cohort study found that prepartum levels of anxiety and depression were strongly correlated to breastfeeding cessation and that early breastfeeding cessation was predictive of an increase in postpartum depression [94].

Other aspects of BFI can also contribute to improvements in mothers,' parents,' and primary caregivers' health outcomes, including those who do not breastfeed. For example, existing studies have shown that skin-to-skin helps to alleviate anxiety and stress of caregivers of full-term infants [95] [96]. Skin-to-skin contact has also been found to alleviate the psychological stress of mothers of premature babies during hospitalisation and improve their sleep status and quality, thereby improving the mother's physical function and mood during the day [97].

In addition, a systematic review and meta-analysis indicates that skin-to-skin contact for preterm and low-birth-weight infants is associated with less postpartum maternal depression, stress and anxiety and improved mother-infant attachment and bonding [98]. When family-centred care is embedded into the philosophy and culture of a neonatal unit, as in the case of BFI, parents/primary

caregivers report higher satisfaction levels and situations that may have caused conflict between themselves and staff are virtually zero [99]. Parents/primary caregivers feel more connected with their baby and in turn can support their infant's brain development and attachment [99].

Further evidence for the potential impact of BFI on infant and parent/primary caregiver outcomes comes from wider research highlighting the effectiveness of the Family Integrated Care programme (FiCare) – which strongly aligns with the BFI neonatal standards – to promote a culture of partnership between parents, carers and healthcare professionals on the neonatal unit. For example, a 26-site cluster-randomised controlled trial shows that FiCare not only improves infant weight gain and increases high-frequency exclusive breastmilk feeding at discharge, but also decreases caregiver stress and anxiety [100].

Image: A tender breastfeeding moment with lots of loving eye contact between mother, Bolanle, and daughter, Oluwasekemi, at the Cherry Trees Children's Centre in Bedford.

REFERENCES AND FOOTNOTES

1. The Scottish Government's Maternal and Infant Nutrition Framework (2011) includes a policy-level commitment to ensure Baby Friendly accreditation of all maternity and health visiting services;

   The breastfeeding strategy for Northern Ireland, Breastfeeding – A Great Start (2013) includes a commitment to achieve Baby Friendly accreditation in all maternity and community settings and to support universities to achieve these standards in their midwifery and health visiting training courses;

   Action 8 of the All Wales Breastfeeding Action Plan (2019) (AWBAP) sets out a "Once for Wales" approach to BFI accreditation;

   The NHS Long Term Plan for England (2019) requires maternity services to "Achieve the standard of the UNICEF UK Baby Friendly Initiative (BFI) for infant feeding, or an equivalent initiative, by March 2027."
2. We undertook a comprehensive consultation exercise with stakeholders including colleagues, assessors and professional officers from the Baby Friendly team; infant feeding leads from across the UK; and relevant stakeholders across UNICEF UK.
3. World Health Organization. (1981). *International Code of Marketing of Breastmilk Substitutes.* Available via World Health Organization: who.int/publications/i/item/9241541601
4. World Health Organisation. *Guidelines on Breastfeeding.* Available via World Health Organization: who.int/health-topics/breastfeeding
5. Cheung, R. (2018). *International Comparisons of health and wellbeing in Early Childhood.* Available via Nuffield Trust: nuffieldtrust.org.uk/research/international-comparisons-of-health-and-wellbeing-in-early-childhood
6. Office for Health Improvement and Disparities. (2024). *Breastfeeding at 6 to 8 weeks, 2023 to 2024 statistical commentary.* Available via UK.Gov: gov.uk/government/statistics/breastfeeding-at-6-to-8-weeks-after-birth-annual-data-april-2023-to-march-2024/breastfeeding-at-6-to-8-weeks-2023-to-2024-statistical-commentary

   Public Health Scotland. (2024). *Infant feeding statistics.* Available via Public Health Scotland: publichealthscotland.scot/publications/infant-feeding-statistics/infant-feeding-statistics-financial-year-2023-to-2024.
7. McAndrew, F., Thompson, J., Fellows, L., Large, A., Speed, M., Renfrew, M. (2012). *Infant feeding survey 2010.* Leeds: Health and Social Care Information Centre. Available via HSCIC: hscic.gov.uk/catalogue/PUB08694/Infant-Feeding-Survey-2010-Consolidated-Report.pdf
8. Department of Health, Social Services and Public Safety. (2024). *Breastfeeding: A great start a strategy for Northern Ireland.* Available via Health-NI: health-ni.gov.uk/sites/default/files/publications/dhssps/breastfeeding-strategy-2014.pdf

   Public Health Scotland. (2024). *Infant feeding statistics financial year 2023-2024.* Available via Public Health Scotland: publichealthscotland.scot/publications/infant-feeding-statistics/infant-feeding-statistics-financial-year-2023-to-2024

   Office for Health Improvement and Disparities. (2024). *Breastfeeding at 6 to 8 weeks, 2023 to 2024 statistical commentary.* Available via Gov.UK: gov.uk/government/statistics/breastfeeding-at-6-to-8-weeks-after-birth-annual-data-april-2023-to-march-
51. Balantekin, K., Anzman-Frasca, S., Francis, L., Ventura, A., Fisher, J., Johnson, S. (2020). *Positive parenting approaches and their association with child eating and weight: A narrative review from infancy to adolescence.* Pediatric Obesity. 15(10). Available via Wiley: onlinelibrary.wiley.com/doi/full/10.1111/ijpo.1272.
52. Leunissen, R., Kerkhof, G., Stijnen, T., Hokken-Koelega, A. (2009). *Timing and tempo of first-year rapid growth in relation to cardiovascular and metabolic risk profile in early adulthood.* JAMA. 301(21). Available via PubMed: pubmed.ncbi.nlm.nih.gov/19491185.
53. Ventura, A. (2017). *Associations between breastfeeding and maternal responsiveness: a systematic review of the literature.* Advances in Nutrition. 8(3). pp495-510. Available via PubMed: pubmed.ncbi.nlm.nih.gov/28507014
54. Zheng, M., Campbell, K., Baur, L., Rissel, C., Wen, L. (2021). *Infant feeding and growth trajectories in early childhood: the application and comparison of two longitudinal modelling approaches.* International Journal of Obesity. 45(10). pp2230-2237. Available via PubMed: pubmed.ncbi.nlm.nih.gov/34230577
55. Azad, M. Vehling, L., Chan, D., Klopp, A., Nickel, N., McGavock, J. Et al. (2018). *Infant feeding and weight gain: separating breast milk from breastfeeding and formula from food.* Pediatrics. 142(4). Available via PubMed: pubmed.ncbi.nlm.nih.gov/30249624
56. Ventura, A., Hernandez, A. (2019). *Effects of opaque, weighted bottles on maternal sensitivity and infant intake.* Matern Child Nutrition. 15(12737). Available via PubMed Central: pmc.ncbi.nlm.nih.gov/articles/PMC7199074
57. NHS. (2023). *How to make up baby formula.* Access at: nhs.uk/conditions/baby/breastfeeding-and-bottle-feeding/bottle-feeding/making-up-baby-formula/
58. Ventura, A., Drewelow, V. (2023). *Knowledge and use of paced bottle-feeding among mothers of young infants.* Journal of Nutrition Education and Behavior. 55(11). pp796-80. Available via PubMed: pubmed.ncbi.nlm.nih.gov/37737815/
59. Ventura, A., Drewelow, V., Richardson, T. (2025). *Does paced bottle-feeding improve the quality and outcome of bottle-feeding interactions?* Early Human Dev. Available via PubMed: pubmed.ncbi.nlm.nih.gov/39693774/
60. Phillips, R. (2013). *The sacred hour: Uninterrupted skin-to-skin contact immediately after birth.* Newborn and Infant Nursing Reviews. 13(2). pp67-72. Available via Science Direct: sciencedirect.com/science/article/abs/pii/S1527336913000299
61. Linde, K., Lehnig, F., Nagl, M., Kersting, A. (2020). *The association between breastfeeding and attachment: A systematic review.* Midwifery. 81. Available via PubMed: pubmed.ncbi.nlm.nih.gov/31830673/
62. Cooke, J., Kochendorfer, L., Stuart-Parrigon, K. L., Koehn, A., Kerns, K. (2019). *Parent–child attachment and children's experience and regulation of emotion: A meta-analytic review.* Emotion. 19(6). pp1103–1126. Available via PubMed: pubmed.ncbi.nlm.nih.gov/30234329/

2024/breastfeeding-at-6-to-8-weeks-2023-to-2024-statistical-commentary

9. Throughout this booklet, 'BFHI' refers to the global Baby Friendly Hospital Initiative and 'BFI' refers to the Baby Friendly Initiative in the UK.

10. Rollins, N., Bhandari, N., Hajeebhoy, N., Horton, S., Lutter, C. K., Martines, J., Victora, C. (2016). *Why invest, and what it will take to improve breastfeeding practices?* The Lancet. 387(10017). pp491-504. Available via The Lancet: thelancet.com/journals/lancet/article/PIIS0140-6736(15)01044-2

11. Pérez-Escamilla, R., Martinez, J., Segura-Pérez, S. (2016). *Impact of the Baby-friendly Hospital Initiative on breastfeeding and child health outcomes: a systematic review.* Maternal & Child Nutrition. 12(3). pp402-417. Available via PubMed: pubmed.ncbi.nlm.nih.gov/26924775/

12. Feltner, C., Weber, R., Stuebe, A., Grodensky, C., Orr, C., Viswanathan, M. (2018). *Breastfeeding programs and policies, breastfeeding uptake, and maternal health outcomes in developed countries.* Available via PubMed: pubmed.ncbi.nlm.nih.gov/30204377/

13. Spaeth, A., Zemp, E., Merten, S., Dratva, J. (2018). *Baby-Friendly Hospital designation has a sustained impact on continued breastfeeding.* Maternal & Child Nutrition. 14(1). e12497. Available via PubMed: pubmed.ncbi.nlm.nih.gov/28795789/

14. Lok, K., Chow, C., Fan, H., Chan, V., Tarrant, M. (2020). *Exposure to baby-friendly hospital practices and mothers' achievement of their planned duration of breastfeeding.* BMC Pregnancy and Childbirth. 20. pp1-8. Available via PubMed: pubmed.ncbi.nlm.nih.gov/32357927/

15. Guajardo-Villar, A., Pelat, C., Blondel, B., Lebreton, E., Demiguel, V., Salanave, B., (2024). *The impact of the Baby-Friendly Hospital Initiative on breastfeeding rates at maternity units in France.* International Journal of Epidemiology. 53(3). Available via PubMed: pubmed.ncbi.nlm.nih.gov/38857529/

16. Public Health Scotland. (2024). *Infant Feeding Statistics: Financial year 2023 to 2024.* Available via Public Health Scotland: publichealthscotland.scot/publications/infant-feeding-statistics/infant-feeding-statistics-financial-year-2023-to-2024/dashboard/

17. Department of Health. (2024). *Breastfeeding – a great start: a strategy for Northern Ireland 2013-2024.* Available via Department of Health: ni.gov.uk/publications/breastfeeding-strategy

18. Public Health England (2016*). Breastfeeding prevalence at 6-8 weeks after birth (Experimental Statistics).* Available via Gov.UK: assets.publishing.service.gov.uk/media/5c6a880bed915d4a3b9d601e/2015_16_Annual_Breastfeeding_Statistical_Commentary.pdf

19. Office for Health Improvement and Disparities. (2024). *Breastfeeding at 6 to 8 weeks, 2023 to 2024 statistical commentary.* Available via Gov.UK: gov.uk/government/statistics/breastfeeding-at-6-to-8-weeks-after-birth-annual-data-april-2023-to-march-2024/breastfeeding-at-6-to-8-weeks-2023-to-2024-statistical-commentary#main-findings

20. Robinson, H., Buccini, G., Curry, L., Perez-Escamilla, R. (2018). *The World Health Organization Code and exclusive breastfeeding in China, India, and Vietnam.* Matern Child Nutrition. 15(1). e12685. Available via PubMed: pubmed.ncbi.nlm.nih.gov/30194804/

21. McNaughton, E., Chen, L., Smith, A. D., Conway, R. (2024). *Healthcare professionals' perspectives on commercial milk formula marketing in the UK: a*

63. Sroufe, L., Egeland, B., Carlson, E., Collins, W. (2005). *The development of the person: The Minnesota study of risk and adaptation from birth to adulthood.* New York: Guilford

64. Nissen, E., Lilja, G., Widström, A., Uvnäs-Moberg, K. (1995). *Elevation of oxytocin levels early postpartum in women.* Acta Obstetricia et Gynecologica Scandinavica. 74(7). pp530-533. Available via PubMed: pubmed.ncbi.nlm.nih.gov/7618451

65. Vittner, D., McGrath, J., Robinson, J., Lawhon, G., Cusson, R., Eisenfeld, L., Cong, X. Et al. (2018). *Increase in oxytocin from skin-to-skin contact enhances development of parent–infant relationship.* Biological Research for Nursing. 20(1). pp54-62. Available via PubMed: pubmed.ncbi.nlm.nih.gov/29017336/

66. Weaver, J., Schofield, T., Papp, L. (2018). *Breastfeeding duration predicts greater maternal sensitivity over the next decade.* Developmental Psychology. 54(2). p220. Available via Science Direct: pmc.ncbi.nlm.nih.gov/articles/PMC6708079/

67. Kim, C., Smith, N., Teti, D. (2024). *Associations Between Breastfeeding, Maternal Emotional Availability, and Infant–Mother Attachment: The Role of Coparenting.* Journal of Human Lactation. Available via PubMed: pubmed.ncbi.nlm.nih.gov/38770794/.

68. LeDrew, M., Benoit, B., O'Grady, K., Ustianov, J., Edwards, C., Gallant, C., Nickel, N. Et al. (2024). *Promoting maternal-child health by increasing breastfeeding rates: a National Canadian Baby-Friendly Initiative Quality Improvement Collaborative Project.* BMJ Open Quality. 13(1). Available via PubMed: pubmed.ncbi.nlm.nih.gov/38232983/

69. Marinelli, A., Del Prete, V., Finale, E., Guala, A., Pelullo, C., Attena, F. (2019). *Breastfeeding with and without the WHO/UNICEF baby-friendly hospital initiative: A cross-sectional survey.* Medicine (Baltimore). 98(44). Available via PubMed: pubmed.ncbi.nlm.nih.gov/31689820/.

70. Darling Rasmussen, P., Storebø, O., Løkkeholt, T., Voss, L., Shmueli-Goetz, Y., Bojesen, A., Simonsen, E., Bilenberg, N. (2019). *Attachment as a Core Feature of Resilience: A Systematic Review and Meta-Analysis.* Psychological Reports. 122(4). Pp1259-1296. Available via PubMed: pubmed.ncbi.nlm.nih.gov/29958512/

71. Mikulincer, M., Shaver, P. (2019). *Attachment orientations and emotion regulation.* Current Opinion in Psychology. 25. pp6-10. Available via PubMed: pubmed.ncbi.nlm.nih.gov/29494853/

72. Nichols, O., Vaughn, B., Lu, T., Krzysik, L., El-Sheikh, M. (2019). *Scripted attachment representations and adaptive functioning during early childhood.* Attachment & Human Development. 21(3). pp289-306. Available via PubMed: pubmed.ncbi.nlm.nih.gov/30744498/

73. Lam, L., Rai, A., Lam, M. (2019). *Attachment problems in childhood and the development of anxiety in adolescents: A systematic review of longitudinal and prospective studies.* Mental Health & Prevention. 14. Available via Science Direct: sciencedirect.com/science/article/abs/pii/S2212657018301119.

74. Spruit, A., Goos, L., Weenink, N., Rodenburg, R., Niemeyer, H., Stams, G. J., & Colonnesi, C. (2020). *The relation between attachment and depression in children and adolescents: A*

qualitative study. Archives of Disease in Childhood. Available via BMJ Journals: adc.bmj.com/content/early/2024/12/21/archdischild-2024-327706

22. Ingram, J., Johnson, D., Condon, L. (2011). *The effects of Baby Friendly Initiative training on breastfeeding rates and the breastfeeding attitudes, knowledge and self-efficacy of community health-care staff*. Primary health care research & development. 12(3). pp266-275. Available via PubMed: pubmed.ncbi.nlm.nih.gov/21798124/
23. Byrom, A., Thomson, G., Dooris, M., Dykes, F. (2021). *UNICEF UK Baby Friendly Initiative: Providing, receiving and leading infant feeding care in a hospital maternity setting—A critical ethnography*. Maternal & Child Nutrition, 17(2), e13114. Available via PubMed: pubmed.ncbi.nlm.nih.gov/33471431/
24. Fair, F., Morison, A., Soltani, H. *Stakeholders' views of the Baby Friendly Initiative implementation and impact: a mixed methods study*. Int Breastfeed J. 19(1). p49. Available via PubMed: pubmed.ncbi.nlm.nih.gov/38997731/
25. Mäkelä, H., Axelin, A., Kolari, T., Kuivalainen, T., Niela-Vilén, H. (2022). *Healthcare professionals' breastfeeding attitudes and hospital practices during delivery and in neonatal intensive care units: pre and post implementing the Baby-Friendly Hospital Initiative*. Journal of Human Lactation. 38(3). pp537-547. Available via PubMed: pubmed.ncbi.nlm.nih.gov/34841935/
26. de Weerth, C., Aatsinki, A.. Azad, M., Bartol, F., Bode, L., Collado, M., Beijers, R. (2023). *Human milk: From complex tailored nutrition to bioactive impact on child cognition and behavior*. Critical Reviews in Food Science and Nutrition. 63(26). pp7945-7982. Available via PubMed: pubmed.ncbi.nlm.nih.gov/35352583
27. Victora, C., Bahl, R., Barros, A. França, G., Horton, S., Krasevec, J., Rollins, N. (2016). *Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect*. The Lancet. 387(10017). pp475-490. Available via The Lancet: thelancet.com/journals/lancet/article/PIIS0140-6736(15)01024-7/abstract
28. Inchingolo, F., Inchingolo, A., Latini, G., Ferrante, L., de Ruvo, E., Campanelli, M., Longo, M., Palermo, A., Inchingolo, A., Dipalma, G. (2024). *Difference in the Intestinal Microbiota between Breastfeed Infants and Infants Fed with Artificial Milk: A Systematic Review. Pathogens*. 13(7). p:533. Available via PubMed: pubmed.ncbi.nlm.nih.gov/39057760/
29. Pannaraj, P., Li, F., Cerini, C., Bender, J., Yang, S., Rollie, A., Aldrovandi, G.. (2017). *Association between breast milk bacterial communities and establishment and development of the infant gut microbiome*. JAMA Pediatrics. 171(7). pp647-654. Available via PubMed: pubmed.ncbi.nlm.nih.gov/28492938/
30. Ajetunmobi, O., Whyte, B., Chalmers, J., Tappin, D. M., Wolfson, L., Fleming, M., Stockton, D. (2015). *Breastfeeding is associated with reduced childhood hospitalization: Evidence from a Scottish Birth Cohort (1997-2009)*. The Journal of Pediatrics. 166(3). pp620-625. Available via PubMed: pubmed.ncbi.nlm.nih.gov/25556021/
31. Payne, S., Quigley, M. (2017*). Breastfeeding and infant hospitalisation: analysis of the UK 2010 Infant Feeding Survey*. Maternal & Child Nutrition. 13(1). e12263. Available via PubMed: pubmed.ncbi.nlm.nih.gov/27010760/
32. Bartick, M., Hernández-Aguilar, M., Wight, N., Mitchell, K., Simon, L., Hanley, L., Meltzer-Brody, S., *multilevel meta-analysis*. Clinical Child and Family Psychology Review. 23. pp54-69. Available via PubMed: pubmed.ncbi.nlm.nih.gov/31392452/
75. Moore, E., Bergman, N., Anderson, G., Medley, N. (2016). *Early skin-to-skin contact for mothers and their healthy newborn infants*. Cochrane Database Syst Rev. 11(11). Available via PubMed: pubmed.ncbi.nlm.nih.gov/27885658/.
76. Lord, L., Harding, J., Crowther, C. et al. *Skin-to-skin contact for the prevention of neonatal hypoglycaemia: a systematic review and meta-analysis*. BMC Pregnancy Childbirth. 23(744). Available via PubMed: pubmed.ncbi.nlm.nih.gov/37865757/
77. Shorey, S., He, H., Morelius, E. (2016). *Skin-to-skin contact by fathers and the impact on infant and paternal outcomes: an integrative review*. Midwifery. 40. pp207-217. Available via PubMed Central: pubmed.ncbi.nlm.nih.gov/27476026/
78. Agudelo, S., Gamboa, O., Acuña, E., Aguirre, L., Bastidas, S., Guijarro, J., Buitrago, L. Et al. (2021). *Randomized clinical trial of the effect of the onset time of skin-to-skin contact at birth, immediate compared to early, on the duration of breastfeeding in full term newborns*. International Breastfeeding Journal. 16. pp1-10. Available via PubMed: pubmed.ncbi.nlm.nih.gov/33849584/
79. Johnston, C., Filion, F., Campbell-Yeo, M., Goulet C., Bell, L., McNaughton, K., Byron, J., Aita, M. Finley, G., Walker, C. (2008). *Kangaroo mother care diminishes pain from heel lance in very preterm neonates: a crossover trial*. BMC Pediatr. 8(13). Available via PubMed: pubmed.ncbi.nlm.nih.gov/18435837/.
80. Ludington-Hoe, S., Johnson, M., Morgan, K., Lewis, T., Gutman, J., Wilson, P. Et al. (2006). *Neurophysiologic assessment of neonatal sleep organization: preliminary results of a randomized, controlled trial of skin contact with preterm infants*. Pediatrics. 117(5). Available via PubMed: /pubmed.ncbi.nlm.nih.gov/16651294/
81. Feldman, R., Eidelman, A. (2003). *Skin-to-skin contact (Kangaroo Care) accelerates autonomic and neurobehavioural maturation in preterm infants*. Dev Med Child Neurol. 45(4). pp274-81. Available via PubMed: pubmed.ncbi.nlm.nih.gov/12647930/
82. Lazarus, M., Marchman, V., Brignoni-Pérez, E., Dubner, S., Feldman, H., Scala, M., Travis, K. (2024). *Inpatient Skin-to-skin Care Predicts 12-Month Neurodevelopmental Outcomes in Very Preterm Infants*. Journal of Pediatrics. 274. Available via PubMed: pubmed.ncbi.nlm.nih.gov/37066271/
83. Smith, E., Hurt, L., Chowdhury, R., Sinha, B., Fawzi, W., Edmond, K., Neovita Study Group. (2017). *Delayed breastfeeding initiation and infant survival: a systematic review and meta-analysis*. PloS one. 12(7). Available via PubMed: pubmed.ncbi.nlm.nih.gov/28746353
84. Quigley, M., Embleton, N., McGuire, W. (2019). *Formula versus donor breast milk for feeding preterm or low birth weight infants*. Cochrane Database of Systematic Reviews. Available via PubMed: pubmed.ncbi.nlm.nih.gov/31322731/.
85. Villamor-Martínez, E., Pierro, M., Cavallaro, G., Mosca, F., Kramer, B., Villamor, E. (2018). *Donor human milk protects against bronchopulmonary dysplasia: a systematic review and meta-analysis*. Nutrients. 10(2). p238. Available via PubMed: pubmed.ncbi.nlm.nih.gov/29461479/

Lawrence, R. (2021). *ABM Clinical Protocol #35: Supporting Breastfeeding During Maternal or Child Hospitalization*. Breastfeeding Medicine. 16(9). pp664–674. Available via PubMed: pubmed.ncbi.nlm.nih.gov/34516777/

33. Ma, J., Qiao, Y., Zhao, P., Li, W., Katzmarzyk, P., Chaput, J. P. (2020). *Breastfeeding and childhood obesity: A 12-country study*. Maternal & Child Nutrition. 16(3). e12984. Available via PubMed: pubmed.ncbi.nlm.nih.gov/32141229/
34. Su, Q., Sun, X., Zhu, L. Yan, Q., Zheng, P., Mao, Y., Ye, D. (2021). *Breastfeeding and the risk of childhood cancer: a systematic review and dose-response meta-analysis*. BMC Med. 19(90). Available via BMC Medicine: bmcmedicine.biomedcentral.com /articles/10.1186/s12916-021-01950-5
35. Grevet, L., Teixeira, D., Pan, P., Jackowski, A., Zugman, A., Miguel, E., Salum, G. (2024). The association between duration of breastfeeding and the trajectory of brain development from childhood to young adulthood: an 8-year longitudinal study. European Child & Adolescent Psychiatry. 33(6). pp1863-1873. Available via PubMed: pubmed.ncbi.nlm.nih.gov/37650992/
36. Deoni, S., Dean, D., Piryatinsky, L., O'Muircheartaigh, J., Waskiewicz, N., Lehman, K., Han, M., Dirks, H. *Breastfeeding and Early White Matter Development: A Cross-Sectional Study*. NeuroImage. 82. pp77–86. Available via PubMed: pubmed.ncbi.nlm.nih.gov/23721722/
37. Kim, K., Choi, J. (2020). *Associations between breastfeeding and cognitive function in children from early childhood to school age: a prospective birth cohort study*. International Breastfeeding Journal. 15. pp1-9. Available via PubMed: pubmed.ncbi.nlm.nih.gov/32993704/
38. Horta, B., Loret de Mola, C., Victora, C. (2015). *Breastfeeding and intelligence: a systematic review and meta-analysis*. Acta Paediatrica. 104. pp14-19. Available via PubMed: pubmed.ncbi.nlm.nih.gov/26211556/
39. Lopez, D. Foxe, J., Mao, Y., Thompson, W., Martin, H., Freedman, E. (2021). *Breastfeeding duration is associated with domain-specific improvements in cognitive performance in 9–10-year-old children*. Frontiers in Public Health. 9(657422). Available via PubMed: pubmed.ncbi.nlm.nih.gov/33981668/
40. Pereyra-Elías, R., Quigley, M., Carson, C. (2022). *To what extent does confounding explain the association between breastfeeding duration and cognitive development up to age 14? Findings from the UK Millennium Cohort Study*. PLoS One. 17(5). Available via PubMed: pubmed.ncbi.nlm.nih.gov/35613097/
41. Richards, M., Hardy, R., Wadsworth, M. (2002). *Long-term efects of breast-feeding in a national birth cohort: educational attainment and midlife cognitive function*. Public Health Nutrition. 5. pp631–635. Available via PubMed: pubmed.ncbi.nlm.nih.gov/12372156/
42. Krol, K., Grossmann, T. (2018). *Psychological effects of breastfeeding on children and mothers*. Bundesgesundheitsblatt, Gesundheitsforschung, Gesundheitsschutz. 61(8). p977. Available via PubMed: hpmc.ncbi.nlm.nih.gov/articles/PMC6096620/
43. Branger, B., Camelot, F., Droz, D., Houbiers, B., Marchalot, A., Bruel, H., Clement, C. (2019). *Breastfeeding and early childhood caries. Review of the literature, recommendations, and prevention*. Archives de Pédiatrie. 26(8). pp497-503. Available via PubMed: pubmed.ncbi.nlm.nih.gov/31685411/
86. Gao, Y., Lu, X., Pan, M. Liu, C., Min, Y., Chen, X. (2024). *Effect of breast milk intake volume on early behavioral neurodevelopment of extremely preterm infants*. Int Breastfeed. 19(3). Available via PubMed: pubmed.ncbi.nlm.nih.gov/38233943
87. Collaborative Group on Hormonal Factors in Breast Cancer. (2002). *Breast cancer and breastfeeding: collaborative reanalysis of individual data from 47 epidemiological studies in 30 countries, including 50 302 women with breast cancer and 96 973 women without the disease*. The Lancet. 360(9328). pp187-195. Available via PubMed: pubmed.ncbi.nlm.nih.gov/12133652/
88. Chowdhury, R., Sinha, B., Sankar, M., Taneja, S., Bhandari, N., Rollins, N., Et al. (2015). *Breastfeeding and maternal health outcomes: a systematic review and meta-analysis*. Acta Paediatrica. 104. pp96-113. Available via PubMed: pmc.ncbi.nlm.nih.gov/articles/PM C4670483/
89. Tschiderer, L., Seekircher, L., Kunutsor, S., Peters, S., O'Keeffe, L., Willeit, P. (2022). *Breastfeeding is associated with a reduced maternal cardiovascular risk: Systematic review and meta-analysis involving data from 8 studies and 1 192 700 parous women*. Journal of the American Heart Association. 11(2). Available via PubMed: pubmed.ncbi.nlm.nih.gov/35014854/
90. Yuen, M., Hall, O., Masters, G., Nephew, B., Carr, C., Leung, K., Moore, S. Et al. (2022). *The effects of breastfeeding on maternal mental health: a systematic review*. Journal of Women's Health. 31(6). pp787-807. Available via PubMed: pubmed.ncbi.nlm.nih.gov/35442804/
91. Tucker, Z., O'Malley, C. (2022). *Mental Health Benefits of Breastfeeding: A Literature Review*. Cureus. 14(9). Available via PubMed: pmc.ncbi.nlm.nih.gov/articles/PMC9572809/.
92. Billings, H., Horsman, J., Soltani, H., Spencer, R. (2024). *Breastfeeding experiences of women with perinatal mental health problems: a systematic review and thematic synthesis*. BMC Pregnancy and Childbirth. 24(1). p582. Available via PubMed: pubmed.ncbi.nlm.nih.gov/39242552
93. Vieira, E., Caldeira, N., Eugênio, D., Lucca, M., Silva, L. (2018). *Breastfeeding self-efficacy and postpartum depression: a cohort study*. Revista latino-americana de enfermagem. 26. Available via PubMed: pubmed.ncbi.nlm.nih.gov/30208 158/
94. Ystrom, E. (2012). *Breastfeeding cessation and symptoms of anxiety and depression: a longitudinal cohort study*. BMC Pregnancy and Childbirth. 12. pp1-6. Available via PubMed: pubmed.ncbi.nlm.nih.gov/22621668/
95. Cong, S., Wang, R., Fan, X., Song, X., Sha, L., Zhu, Z., Zhang, A. Et al. (2021). *Skin-to-skin contact to improve premature mothers' anxiety and stress state: A meta-analysis*. Maternal & Child Nutrition. 17(4). Available via PubMed: pubmed.ncbi.nlm.nih.gov/34258864/
96. Mendoza-Aucaruri, L., López-Mesia, J., Ttito-Paricahua, L., Magallanes-Corimanya, M., Asencios-Falcón, E., Lopez-Gomero, A. Et al. (2024). *Effects of skin-to-skin contact on mental health outcomes in the parents of full-term newborns: A systematic review and meta-analysis of randomized clinical trials*. Journal of Affective Disorders. Available via PubMed: pubmed.ncbi.nlm.nih.gov/39442709/

44. Spencer, N., Raman, S., O'Hare, B., Tamburlini, G. (2019). *Addressing inequities in child health and development: towards social justice.* BMJ Paediatric. 3(1). e000503. Available via PubMed: pubmed.ncbi.nlm.nih.gov/31423469/

45. Hemingway, S., Forson-Dare, Z., Ebeling, M., Taylor, S. (2021). *Racial disparities in sustaining breastfeeding in a baby-friendly designated southeastern United States hospital: an opportunity to investigate systemic racism.* Breastfeeding Medicine. 16(2). pp150-155. Available via PubMed: pubmed.ncbi.nlm.nih.gov/33539272/

46. Kivlighan, K., Murray-Krezan, C., Schwartz, T., Shuster, G., Cox, K. *Improved breastfeeding duration with Baby Friendly Hospital Initiative implementation in a diverse and underserved population.* Birth. 47(1). pp135-143. Available via PubMed: pubmed.ncbi.nlm.nih.gov/31788842/

47. Dharod, J., Frazier, C., Labban, J., Black, M. (2024). *Breastfeeding duration and associations with prevention of accelerated growth among infants from low-income, racially and ethnically diverse backgrounds.* Public Health Nutrition. 27(1). e6. Available via PubMed: pubmed.ncbi.nlm.nih.gov/38047374/

48. Ajetunmobi, O., McIntosh, E., Stockton, D., Tappin, D., Whyte, B. (2024*). Levelling up health in the early years: A cost-analysis of infant feeding and healthcare.* PLoS One. 19(5). e0300267. Available via PubMed: pubmed.ncbi.nlm.nih.gov/38776279/

49. Black, M., Aboud, F. (2011). *Responsive feeding is embedded in a theoretical framework of responsive parenting.* The Journal of Nutrition. 141(3). pp490-494. Available via PubMed: pmc.ncbi.nlm.nih.gov/articles/PMC3040905/

50. Redsell, S., Slater, V., Rose, J., Olander, E., Matvienko-Sikar, K. (2011). *Barriers and enablers to caregivers' responsive feeding behaviour: A systematic review to inform childhood obesity prevention.* Obesity Reviews. e13228. Available via PubMed: https://pubmed.ncbi.nlm.nih.gov/21427696/

97. Chen, W., Wu, Y., Xu, M., Tung, T. (2022). *Effect of kangaroo mother care on the psychological stress response and sleep quality of mothers with premature infants in the neonatal intensive care unit.* Frontiers in Pediatrics. Available via PubMed: pubmed.ncbi.nlm.nih.gov/35935377

98. Pathak, B., Sinha, B., Sharma, N., Mazumder, S., Bhandari, N. (2023). *Effects of kangaroo mother care on maternal and paternal health: systematic review and meta-analysis.* Bulletin of the World Health Organization. 101(6). p391. Available via PubMed: pubmed.ncbi.nlm.nih.gov/37265678/

99. Read, K., Louise Rattenbury, R. (2018). *Parents as partners in care: Lessons from the Baby Friendly Initiative in Exeter.* Journal of Neonatal Nursing. 24(1). pp17-20. Available via Science Direct: sciencedirect.com/science/article/abs/pii/S1355184117301850

100. O'Brien, K., Robson, K., Bracht, M., Cruz, M., Lui, K., Alvaro, R., Hales, D. Et al. (2018). *Effectiveness of family integrated care in neonatal intensive care units on infant and parent outcomes: a multicentre, multinational, cluster-randomised controlled trial.* The Lancet Child & Adolescent Health. 2(4). pp245-254. Available via PubMed: pubmed.ncbi.nlm.nih.gov/30169298/

101. Mónaco, E., Schoeps, K., Montoya-Castilla, L. (2019). *Attachment styles and well-being in adolescents: How does emotional development affect this relationship?* International Journal of Environmental Research and Public Health. 16(14). p2554. Available via PubMed Central: pmc.ncbi.nlm.nih.gov/articles/PMC6678901/

102. Karreman, A., Vingerhoets, A. (2012). *Attachment and well-being: The mediating role of emotion regulation and resilience.* Personality and Individual differences. 53(7). pp821-826. Available via ScienceDirect: sciencedirect.com/science/article/abs/pii/S0191886912003029

103. Borra, C., Iacovou, M., Sevilla, A. (2015). *New Evidence on Breastfeeding and Postpartum Depression: The Importance of Understanding Women's Intentions.* Maternal Child Health. 19. pp897–907. Available via PubMed: pubmed.ncbi.nlm.nih.gov/25138629/