



The Food
Foundation

Early Years Series: Report 2 Breaking down the barriers to breastfeeding to support healthy weight in childhood

Technical Appendix

February 2024

The Food Foundation

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Overview

This technical appendix provides details and methods of the research compiled for the report '*Breaking down the barriers to breastfeeding to support healthy weight in childhood*' published by The Food Foundation in February 2024. The report synthesises evidence and draws out key conclusions related to breastfeeding, drawing primarily on:

- A **literature review** of existing data and insights of breastfeeding in the UK, policies, practice and recommendations, as well as of government statistics on breastfeeding
- **Qualitative interviews** with mothers about their experiences of feeding, and a **case study** of local action
- A **quantitative survey** on mothers experience of feeding, commissioned by The Food Foundation and carried out by YouGov

It also draws on **additional qualitative research** carried by Bremner & Co (commissioned by Impact on Urban Health) which examines the perspectives of stakeholders across the breastfeeding space, including NGOs, charities, local government, health visitors and midwives, on the barriers to breastfeeding initiation and longevity, as well as the implications for infant food security. The research also analysed how the media portrays infant feeding.

Literature review

A literature review exploring breastfeeding rates and policies in the UK, barriers and considerations relevant to breastfeeding, and existing policy recommendations was carried out. The literature review was carried out by Food Foundation staff as well as research consultants Dr Tim Lobstein and Isabel Hughes.

Method and focus:

The review included government publications, peer-reviewed articles and grey literature reports. This was not a systematic review but a comprehensive presentation of the available evidence and relevant reports where identified through snowballing. The literature was revisited on an iterative basis as further insights emerged from other aspects of the research.

The literature review included:

- Public Health recommendations on breastfeeding and support provision: UK wide and in each of the devolved nations (e.g. DHSC, SACN), as well as global recommendations (e.g. WHO and UNICEF)
- UK infant feeding rates: data on breastfeeding from the UK, and each of the devolved nations. Included data on initiation, duration of exclusive breastfeeding, duration of any breastfeeding and how this varies by nation, socio-economic characteristics and any other significant variables all relevant. This primarily drew on the last official UK wide survey (IFS 2010), but due to the age of the data also drew on more recent government data from each of the nations. Finally, data from other countries was looked at to set the UK figures in context of other countries.
- Evidence for benefits of breastfeeding: evidence for the link between obesity and breastfeeding, as well as mechanisms for the beneficial impact of breastfeeding on obesity.
- Evidence on the barriers to breastfeeding: review of reported barriers to breastfeeding and the experiences of mothers with breastfeeding, as well as additional evidence underlying the barriers identified using government and other sources (for this research it was primarily focused on support in health care, workplace support, maternity pay/leave).
- Evidence on formula marketing: This covered regulations around formula marketing and existing policy levers, exposure of parents to marketing and the impact that this has on breastfeeding, amount spent on formula marketing.
- Policy recommendations from charities and key actors: This included reviewing recommendations in key reports from First Steps Nutrition, Obesity Health Alliance, Royal College of Midwives, RCPCH, UNICEF UK, Maternity Action, Institute of Health Visiting, APPG on Infant Feeding.

Qualitative research

Citizen interviews

An independent qualitative study was commissioned by The Food Foundation and undertaken by ActivMob CIC, a social enterprise, working within communities, using asset-based methodologies.

Methods:

In depth 1-2-1 interviews were conducted with participants, with a topic guide used for each interviews. These questions were developed by ActivMob CIC in collaboration with The Food Foundation and the project advisors. Question testing was also carried out with the first two participants, and subsequently refined based on their feedback. In addition, 'journey mapping' was used in the interviews to explore intentions related to breastfeeding versus the reality, and to capture what the pressures were.

Sample

Participants were recruited in Manchester, Kent, London and Cornwall to secure geographical diversity, using snowball recruitment methods. The selected participants included 9 women and 1 man with an age range of 18-40. Additional characteristics of the sample included:

- Ethnicity: white British (n=7), British Asian (n=1), Pakistani (n=1), other (n=1)
- Number of children: 1 child (n=6), 2 children (n=1), 3 children (n=3)
- Benefit recipients: In receipt of universal credit or other benefit (n=5), have or currently do receive Healthy Start (n=3)
- Feeding methods: at birth (breast n=5, formula n=5), at 6 months (breast = 3, formula = 5, mixed = 2)

Main findings

- Intentions, expectations and reality
 - Nine of the 10 of the participants intended to breastfeed, citing a range of reasons including health and wellbeing of the baby, convenience, cost and previous regrets.
 - In reality, a number of factors influenced decisions on feeding. These included factors such as conflicting information from the system, feelings of judgement, lack of timely support.
 - A number of barriers was raised, concerning knowledge, convenience, conflicting information, health status in the early days and lack of support, including financial support.
- What would help
 - More information in the early days
 - More understanding of what families need
 - Equitable access to support
 - For those reliant on formula, better pricing of formula was also highlighted

Local case study

A case study based on an evaluation of Breastfeeding support provided as part of Better Start Bradford was carried out by Dea Nielsen et al, University of Leeds.

Breastfeeding Support received an implementation evaluation by the Better Start Bradford Innovation Hub. This evaluation consisted of collecting routine monitoring data throughout the duration of the project's lifespan, which was then collated six months prior to the project's end of contract. The specific aim of the implementation evaluation was to understand the delivery of the project in terms of whether it conformed to the service design, and this was done through examining the intervention's performance in four key areas; referrals, recruitment, implementation, and reach. Referral sources were examined to understand where and how referrals into the project were received, as well as how quickly referrals were contacted. Recruitment was considered by the number of referrals that were converted into women enrolled onto the project, as well as how many went on to participate in the service (e.g. received at least one support contact). Implementation considered the total number of contacts the service provided, and the median number of support contacts women received. Reach considered

the ethnic backgrounds of participants, and compared this to population level information to understand whether the intervention was reaching a representative sample of the population.

In addition to the quantitative implementation evaluation, the service also received a qualitative evaluation. Interviews were conducted with six members of staff within the project, and thirteen women who received the project between August 2021 - April 2022. These were conducted over the phone or in video calls by trained members of the research team and lasted approximately one hour. Staff participated in the interviews during their working hours, and women received a £20 voucher as compensation for their participation. Transcriptions of the audio recordings of the interviews were uploaded to NVivo 12, and thematic analysis was used to understand and explore patterns within the participants' views.

Quantitative research

You Gov Survey

The Food Foundation commissioned You Gov Survey to undertake a survey of mothers with children under 18 months to better understand their experiences of feeding their infant, in particular focused on the barriers to breastfeeding

Methods:

The total sample size was 506 mothers of children age 18 months or less. Fieldwork was undertaken between 11th - 19th January 2024. The survey was carried out online. The figures have been weighted by age and region of live births in the UK.

Respondents were asked questions around breastfeeding intention, barriers to their own breastfeeding intentions, and factors they felt would have enabled them to breastfeed for longer. Questions were asked about exclusive breastfeeding, as well as any breastfeeding. In addition, questions were asked around the affordability of formula and harmful practices used when formula was unaffordable.

Key findings:

- Of the women who reported to exclusively breastfeed at some point but had stopped (n=231), 44% would have liked to exclusively breastfeed for longer
- Factors that would have helped them to breastfeed for longer include: more support from healthcare professionals (42%), higher maternity pay/more financial support (28%), longer maternity leave (22%), more support from family and friend (22%) and more places to feed baby in public (21%).
- Of those mothers who formula fed (exclusively or in combination with breastfeeding) (n=268), 1 in 4 (26%) said they struggled to afford formula.
- To help feed their child, mothers reported to shop around for cheapest (23%), switch brands (12%), borrow money (10%), wean earlier than 6 mo (10%) and skip meals for themselves (10%).

Additional research

Landscape analysis on policy and practice for breastfeeding

This report integrates unpublished research carried out by Dayna Brackley and Cressida Pidgeon on behalf of Bremner & Co and Impact on Urban Health (awaiting publication).

Methodology

Stakeholder interviews

The main part of the research involved interviews with people working in the field of breastfeeding. We worked with Impact on Urban Health and their partners to identify suitable contacts from a cross section of organisations. The sectors included were academia, local and national government, NGOs, charities and campaigners, health and industry. 30 interviews were scheduled and conducted in person and online. The interviews were semi-structured, working with a prepared research guide. They were transcribed and analysed to identify themes, areas of agreement and divergence. Informed consent was secured from all participants, and it was made clear that all views and comments would be anonymised.

Desk research

We also conducted desk research to understand the current policy and evidence landscape around breastfeeding and formula feeding. For this we used existing research from Impact on Urban Health, academic databases, grey literature and webinars. Our research was guided by our research questions, which were informed by an initial review of the literature.

Media and visual content analysis

Nexis, a news and business research database, was used to search the top circulating UK National Newspapers for articles mentioning breastfeeding between March-July 2023. The inclusion criteria included: at least three mentions of breastfeeding and articles focused on England. Articles were excluded if they were promotions, advertorials, duplicates or letters. Irrelevant articles were removed from the sample, resulting in n=65 articles. For the visual content analysis, the text-only articles from Nexis were manually matched to online equivalents newspaper articles, resulting in n=63. Using a grounded theory approach (Charmaz, 2006), thematic codes were generated from the articles and a coding framework created. The visual imagery was reviewed and categories added to the framework. Manifest content was logged: headline, title, author, stakeholder voices, image type and sentiment. Latent content was then interrogated to create thematic areas. All data was recorded onto the coding framework and then data analysed.

Summary of figures used in the report

Figures 1 + 2: Exclusive breastfeeding up to 6 months across the regions in England, and across the UK nations

Source: Infant Feeding Survey, 2010, See: <https://digital.nhs.uk/data-and-information/publications/statistical/infant-feeding-survey/infant-feeding-survey-uk-2010> and SACN, Feeding in the first year of life, 2018, See: <https://www.gov.uk/government/publications/feeding-in-the-first-year-of-life-sacn-report>

The Infant Feeding Survey was an annual survey, carried out every 5 years between 1975 and 2010. The 2010 survey was the eighth of these reports with the aim of providing estimates related to infant feeding practices adopted by mothers in the first 98-10 months after their baby was born. The graphs presented in the report show the geographical variation in exclusive breastfeeding in England, and the UK nations, based on 2010 Infant Feeding Survey data and extracted from a 2018 SACN report. Both graphs show the pattern of decreasing rates across the 6 month period, with particular decreases at 1 week and 6 weeks. They also demonstrate some of the geographical differences that are present in England, with rates lower in the North West and North East, and higher in London and the South East.

Figure 3: Barriers to breastfeeding map

Source: Brackley D, Pidgeon C. *Breastfeeding – a review of the policy and practice landscape (Impact on Urban Health and Bremner & Co, (awaiting publication)*

This map is from work conducted by Bremner & Co and Impact on Urban health (see above) and maps the different barriers to breastfeeding that emerged from their research which included a literature review, interviews and a media analysis. It highlights the interactions between these barriers, and some of the wider drivers of these barriers that exist at a policy level.

Figures 4+5: Support in the first 6 weeks and breastfeeding support during nights and weekends

Source: Quality Care Commission, *Maternity Survey 2022* see:

<https://www.cqc.org.uk/publication/surveys/maternity-survey-2022>

The Maternity Survey 2022 is a survey conducted by the Quality Care Commission which explores the experiences of women and other pregnant people. The iteration presented in the report included 20,927 births between 1 and 28 February 2022. While undertaking research for the report we compared experiences recorded in 2022 to 2019 (pre and post covid), and have included graphs comparing the responses for two questions:

- F15. In the six weeks after the birth of your baby did you receive help and advice from a midwife or health visitor about feeding your baby?
- F16. If, during evenings, nights or weekends, you needed support or advice about feeding your baby, were you able to get this?

In both cases, there has been a decline in the number of respondents reporting 'yes, always' and 'yes, sometimes' to these questions. A number of other questions relevant to the report also highlighted a decline during this time period, for instance

- The number of respondents reporting 'yes, always' when asked whether they received relevant information from midwives regarding feeding during antenatal appointments dropped from 57% to 53%
- The number of respondents reporting 'yes, always' when asked about feeding advice from a midwife or health visitor in the 6 weeks following their baby's birth declined from 61% to 56%.

Figures 6: Breastfeeding initiation rates plotted against ranked index of deprivation

Source(s): NHS England, *Statistical Release Breastfeeding Initiation, 2017*; Department for Communities and Local Government, *English Indices of Deprivation, 2015 (62,63)*

This graph draws on two government data sets which have reported on breastfeeding rates at a CCG level and deprivation at the CCG level, with the aim of examining the relationship between breastfeeding rates and deprivation level. Datasets were chosen for comparable years, where CCG boundaries were the same and plotted against each other. Further analysis was also conducted, grouping the CCGs into quintiles based on their IHD score and comparing average breastfeeding rates in each. A trend line was added to a scatterplot, demonstrating a significant relationship.

Figure 7: Scotland: Exclusive breastfeeding up to 6 weeks according to deprivation quintile of the mother, 21-22

Source: Public Health Scotland, *Infant Feeding Statistics, 2022*, See:

<https://publichealthscotland.scot/publications/infant-feeding-statistics/infant-feeding-statistics-financial-year-2021-to-2022>

The data presented is from an annual release from Public Health Scotland (PHS) which provides an update of infant feeding statistics including data for children eligible for child health reviews in the financial year 2021/22. The information is collected at Health Visitor reviews of children at around 10-14 days (First Visit), 6-8 weeks, and 13-15 months of age. The graph presents rates of exclusive breastfeeding up to 6 weeks, according to deprivation quintile of the mother.

Figures 8+9: Average payment rate available to mothers during maternity leave, number of weeks full pay available in maternity leave (OECD)

Source: OECD, *Parental Leave Systems*, 2022, See: <https://www.oecd.org/els/family/database.htm>

The OECD hosts a database of family statistics, which was developed to provide cross-national indicators on family outcomes and family policies across the OECD countries, its enhanced engagement partners and EU member states. The database draws on national and international databases, and includes 70 indicators across four dimensions – structure of families, labour market position of families, public policies for families and children, and child outcomes. The graphs included in the report draw on data from two of these indicators related to maternity pay.

Figure 10: Unit cost of formula over time

Source: First Steps Nutrition, *What the Cost of Living Crisis means for the diets of infants and young children and recommended actions*. See:

https://static1.squarespace.com/static/59f75004f09ca48694070f3b/t/628e041714d478759eeb46e8/1653474327894/Cost+of+living+briefing+note_May+2022_forwebsite.pdf

This graph is from First Steps Nutrition and tracks the change in unit cost of infant formula across key brands, and compares it to the Health Start Allowance available at the time. The graph highlights the big difference between the weekly Healthy Start Allowance and the cost of a tub of formula, and also highlights the increase in formula prices that have been seen since March 2021.

Figure 11: proportion of mother who have seen baby milk advertised across different media

Source: Brown et al, 2020 (commissioned by First Steps Nutrition Trust), See:

https://static1.squarespace.com/static/59f75004f09ca48694070f3b/t/6053645514d0f3072adec94e/1616077909798/Marketing_of_infant_milk_in_the_UK-what_do_parents_see_and_believe_finala.pdf

This graph is from data included in a report commissioned by First Steps Nutrition Trust which explores the marketing of infant milk and what parents see and believe. The study, conducted in 2019, used an online, self-report questionnaire consisting of both open and close questions, and was answered by parents aged 18+ with a baby aged 0-12 months old, living in the UK. The survey asked questions around exposure to infant milk adverts, recall of advert messaging, perceptions of adverts and infant feeding decisions. The graph used in the report presents the range of media where mothers reported seeing baby milk advertised, either 'ever seen' or 'seen lots of times'.

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