



Devon's conception - 4 years old Infant Feeding Strategic Action Plan: The Health of our population, today, tomorrow and for everybody's future.

1. Contents

Contents:	Page 2
Introduction	Page 3
Policy Drivers	Page 5
From Birth: Why Decide to Breastfeed?	Page 6
Breastfeeding: The challenge	Page 10
Donor Milk Provision	Page 14
Responsive Parenting/Responsive Feeding	Page 15
Healthy Start Voucher and Vitamin Scheme: The Current Evidence and Challenge	Page 17
Appropriate introduction to solids and subsequent healthy diet: The current evidence	Page 20
Appropriate introduction to solids and subsequent healthy diet: The Challenge	Page 23
Other Factors Impacting on Health	Page 24
The Strategic Aims	Page 24
How will we work towards these Aims	Page 26
References	Page 33

2. Introduction

- 2.1 Devon's conception four years old Infant Feeding Strategic Action Plan: The Health of our population, today, tomorrow and for everybody's future, holds the vision that all children within our STP footprint, from conception onwards, will be supported to develop a healthy, and resilient lifestyle through responsive parenting, thus responsive feeding.
- 2.2 There is a plethora of evidence available to suggest that decisions made regarding Infant feeding can have a significant impact on both the child and the mother's future health outcomes (Brown 2017, Public Health England, 2016a).
- 2.3 Infant feeding decisions have a significantly direct influence on public health outcomes from birth, with the largest health promoting activity being the breastfeeding of a baby. Breastfeeding has a vastly important role to play in reducing health inequalities and in improving the health of children and families, whilst benefitting our economic and global sustainability.
- 2.4 Exclusive breastfeeding is recommended up to 6 months of age, with continued breastfeeding along with appropriate complementary foods up to two years of age and beyond (WHO, 2017).
- 2.5 In addition to this there is a robust evidence base in relation to future healthy diet for children and young people (Department of Health 2017 and Weichselbaum & Butriss,2011).
- 2.6 Furthermore, there is evidence that children who come from disadvantaged families, benefit from additional vitamin supplements, as part of the Healthy Start scheme (Scientific Advisory Committee on Nutrition, 2008). However, leading Professors within the field on nutrition argue that further research is required to evaluate this further (Wright 2017).
- 2.7 Despite wide acceptance and integration of this knowledge within our research and government policies, we continue to experience a gap between prioritising our children's needs through appropriate Infant feeding and healthy childhood nutrition, and the actual practice of Infant feeding from birth and beyond (Unicef, 2017a).
- 2.8 The concept of developing this wider STP Devon supported strategy is to provide a foundation to be built upon, by engaging with all our stakeholders and communities, to embed a culture of commitment to healthy Infant feeding which promotes our children's future health.
- 2.9 This strategy also recognises that the early initiation of breastfeeding for some families might not take place for a variety of reasons. However, these families still have an evidence-based decision-making pathway, that can promote their child's future health and wellbeing, involving Infant feeding, responsive feeding, responsive parenting and healthy diet for their children. It is recognised that these families are integral to this strategy from conception and beyond.
- 2.10 The Strategy's aims are:
 - Breastfeeding becomes the largest feeding method across our Devon population for the first 6 months of life and then accompanies complimentary foods up to two years and beyond.

- Families and communities make healthier feeding choices, which promote optimal health and wellbeing for all children and their families for life.
- Families receive recognition for their personal situations and sensitivities, whilst being supported to optimise healthy choices, regarding Infant feeding for their children and consequently for future generations.
- The infrastructure within our communities, workplaces, public and private organisations at the very minimum, protect, support and promote breastfeeding, and healthy eating. The infrastructure, sustains a wider commitment to not only individual children and mother's public health, but also to the sustainability of our future generation's health and wellbeing, our wider financial stability and our future environmental stability.
- Infant feeding has a smooth strategy in place, which provides strategic consistency to the support received by families, in any period of changeable and transitional times.
- 2.11 The nature of this strategy means that it will require long term support and commitment, which will involve multiple people from a variety of personal, professional and community-based directions. The future investment and action of this strategy will vary; therefore, this strategy will be reviewed in 2021, in order to refocus and regenerate. The Infant feeding Alliance group will oversee this strategy. It will however require a wider focus of commitment and changeable involvement from many organisations and people including:
 - A variety of Families and Communities within our wider Plymouth, Torbay and Devon Council area STP footprint.
 - Politicians and policy leaders at local, regional and national levels
 - Healthcare professionals
 - Community based workers
 - Managers in health and social care who often have a more strategic approach and may not necessarily be a healthcare professional such as commissioners of services.
 - Educators Including all education settings from early education such as children's centre's and nurseries up until University age
 - Employers of our Devon County Council footprint population, therefore having a wider influence on our Devon communities through work place-based engagement.
 - The community and Voluntary sectors
 - Commerce, Leisure providers and businesses
 - Those who have the potential to influence public opinion, such as our media or social marketing organisations within our wider STP footprint area.
- 2.12 This strategy is using the term Infant to include children and babies from conception through to and including 4 years of age.
- 2.13 This strategy will provide a focus on four key areas:
 - Breastfeeding
 - Responsive feeding
 - Healthy Start Vitamins

- Healthy and appropriate weaning onto solid foods and subsequent healthy diet
- 2.14 Future areas of strategic development might be formed in the future, if the Infant Feeding Alliance group feel this is necessary.
- 2.15 Further development of the Devon's Five to Nineteen Years Healthy Diet Strategic Action Plan: The Health of our population, today, tomorrow and for everybody's future, will be undertaken in 2018 led by Public Health Devon in its development.

3 **Policy Drivers**

Sustainability and Transformation Plan (STP) Wider Devon November 2016

The STP recognises local community support as a way to realign resources to achieve population and service equity. Children and young people are one of the seven high priority areas and the STP recognises that changes are required to maternity provisions in order to ensure long term sustainability. The STP has a mission point that focuses on the cost effectiveness per population head, whilst also focusing on population benefits. It recognises the need for the population to take responsibility for their own health, in order to stay well for longer. Breastfeeding can achieve all of these, and the STP recognises the need for seamless support and access to the correct service for children and young people across the STP footprint which aligns Torbay Unitary council, Plymouth Unitary council and Devon County Council areas. (Sustainability and Transformation Plan, 2016)

The National Maternity Review 2016, Better Births,

Provides a vision for the planning, design and safe delivery of services within maternity services across England. The vision is for them to become safer, more personalised, kinder, professional and more family friendly; where every woman has access to information to enable her to make decisions about her care; and where she and her baby can access support that is centred around their individual needs and circumstances. Furthermore, it recognises the need for all staff to be supported to deliver care which is women centred, working in high performing teams, in organisations which are well led and in cultures which promote innovation, continuous learning, and break down organisational and professional boundaries (NHS England, 2016).

1001 Critical Days The importance of the conception to age two period

1001 Critical Days Manifesto was officially launched in 2013. It provides a wider vision for the provisions of services in the UK from conception to two years old. It recognises that this period of life is crucial to increase children's life chances, and a commitment is required to ensure all babies have the best possible start in life. The Manifesto highlights the importance of acting early to enhance outcomes for children and recognises that too many children and young people do not have the start in life they need, leading to high costs for society, and too many affected lives. Every child deserves an equal opportunity to lead a healthy and fulfilling life, and the 1001 Critical Days Manifesto supports this (Leadsom et al 2013).

The UN Sustainable Development Goals; 17 Goals to Transform Our World (2015)

These are 17 goals that have been agreed by some of our developed and developing countries alike, covering broad issues such as climate change, poverty reduction, but also more specific issues including ending hunger and improving nutrition, ensuring healthy lives and promoting wellbeing (United Nations, 2015).

The European Commission Protection, promotion and support of Breastfeeding in Europe (2004)

Forms a Blueprint for Action, developed and supported by all EU states including Britain. It provides a framework for the development of proposals and recommendations for the protection, promotion and support of breastfeeding plans (Cattaneo, 2004).

WHO, The Global Strategy on Infant and Young Child Feeding (2003)

This was adopted by all WHO member in May 2002 at the 55th World Health Assembly. It still to this day provides a basis for public health initiatives in the recognition that nutrition for Infants and children has a significant impact on the early months and years of life. It recognises the crucial role that appropriate feeding practices play in achieving optimal health outcomes (WHO and Unicef 2003).

The NHS Outcomes Framework 2015-16: and Public Health Outcomes Framework 2016-2019: Improving Outcomes and Supporting Transparency 2016

A Department of Health requirement that ensures local authorities monitor breastfeeding data and aims to increase breastfeeding initiation and prevalence, and reduces infant mortality (NHS Group, 2014 & Department of Health, 2016b).

The Healthy Child Programme (2009):

The Healthy Child Programme for the early life stages focuses on a universal preventative service, providing families with a programme of screening, immunisation, health and development reviews, supplemented by advice around health, wellbeing and parenting. Throughout which the benefits of breastfeeding and healthy eating are widely recognised (Schribman and Billingham, 2009).

The UNICEF UK Baby Friendly Initiative (BFI)

An initiative designed to support breastfeeding and parent infant relationships by working with public services to improve standards of care. It is based on a global accreditation programme of UNICEF and the World Health Organisation (Unicef, 2018).

Healthy Start

Healthy Start is a UK-wide government scheme, aiming to improve the health of low income pregnant women and families on benefits and tax credits (Healthy Start, 2017).

These wider policies all impact upon local policies that inform local services.

4. From Birth: Why decide to Breastfeed?

- 4.1 Never before have we known so much regarding the benefits of breastfeeding, in relation to our children's wellbeing, the wellbeing of our children's parents, our population health, our environment and our economy.
- 4.2 Breastfeeding for our children:
 - The evidence is clear that <u>not</u> breastfeeding your child can lead to an increased risk of; obesity in later life; Sudden Infant Death Syndrome (SIDS); Otitis Media which is a type of ear infection; tooth decay and dental malocclusion in under ones; lower respiratory infections (Chest infections); diarrhoea and vomiting due to gastroenteritis; childhood leukaemia; and death from a serious gut infection in sick

and premature babies called Necrotising Enterocolitis (NEC). (Victora et al 2016, Acta Paediatrica 2015, Hansen, 2016. and Amitay et al 2015).

- There is further evidence to suggest that there might be a link to baby's having a reduced educational attainment when they are <u>not</u> breastfed. (Victora et al 2016 and Horta et al 2015)
- The evidence also suggests that Breastfeeding supports close and loving relationships, which helps the baby's brain development and impacts on potential attachment (Public Health England, 2016)
- Developing research is also currently raising awareness of the concept of the Microbiome and its overall benefit to children's immunological health and resilience. This microbiome is believed to only be activated by vaginal birth and subsequent breastfeeding, in what is referred to as the seed and feed Immunological maternal heritage process. (Mueller 2015, Dietert 2013, Dietert 2012).
- Furthermore, we know that breastfeeding also impacts on reducing health inequalities. For example, a breastfed child from a low-income background is recognised to have better health outcomes, than a formula fed child from a more affluent background (Unicef 2017c).
- The nutritional value of breastmilk is clear. Human milk for human babies, with the correctly balanced level of nutrition, for the correct stage of the infant's life, whether they are premature, 6 weeks old or two years old unless otherwise guided by a medical practitioner. A substance that develops and changes as the child develops. A substance that responds to negative pathogens that the mother might come in to contact with and changes as an immune response in order to protect the child.



Source:<u>https://vivbennett.blog.gov.uk/2015/09/28/why-breast-is-really-best-nicole-stephens/</u>

- In addition to this a review of literature in relation to Breastfeeding and Language outcomes has widely supported the concept that there are neurodevelopmental differences related to Infant feeding behaviour with breastfeeding having positive outcomes to language development (Mahurin Smith et al 2014).
- Furthermore, multiple studies for many years have identified breastfeeding to have a protective factor which promotes speech and language development (Dee et al 2007, Harrison and McLeod, 2010, Tomblin et al 1997, Drane 2003).
- 4.3 Breastfeeding for our mothers and families:

- There is a large body of evidence that demonstrates the positive preventative effects of good early parent-child interactions and the impact that this has on future wellbeing of the child (Executive, 2005). These interactions are fundamental in the early days of life and are integral to positive, responsive Infant feeding.
- Breastfeeding supports close and loving relationships, which stimulate the release of the hormone oxytocin, thus encouraging the mothers to bond with their baby and form a close and loving relationship. Such relationships improve mental health and reduces the risk of postnatal depression (Acta Paediatrica 2015).
- Postnatal depression can compromise the mother's ability to respond to her infant's cues and to engage in responsive interactions with her infant (Eccleson 2017).
- Further evidence identifies a significant reduction in the risk of breast cancer for women who have breastfed their baby. The longer the breastfeeding continues the higher the reduction in risk (Chowdury et al 2015). Furthermore, evidence has suggested that women who breastfed and then later are diagnosed with breast cancer, have a more positive longitudinal outcome than those who didn't breastfeed at all (Loof-Johansen 2015).
- In addition to this, there is evidence that suggests that breastfeeding offers a protective benefit against ovarian cancer for women who breastfeed (Chowdury et al 2015).
- Furthermore, there are potential links that are suggestive that breastfeeding reduces the risk of Type 2 diabetes (Chowdury et al 2015).
- There are also benefits in relation to increased financial health for parents of a baby who is breastfed, as breastmilk is free, therefore does not have this additional financial impact that a mother having to buy formula milk would have.
- 4.4 Breastfeeding for our population
 - The cost to the NHS every year of treating just 5 illnesses linked to babies <u>not</u> being breastfed is projected to be at least £48 million (Renfrew et al 2012).
 - Improved breastfeeding rates have been identified to potentially prevent 823,000 annual deaths in children younger than 5 years old globally (Victora et al 2016).
 - The impact of our global population costs in relation to women <u>not</u> breastfeeding is high. Breastfeeding can be used as a highly effective form of temporary birth control, if the baby is under 6 months old and has been exclusive breastfed since birth, if mother's periods have not returned, and if the mother's baby has consistently been breastfed at a minimum of every four hours since birth, from the breast therefore meaning no bottle's or alternative feeding method, and that soothers have never been used and ensuring no alternative food source has been given (ARHP 2009). The reduction of menstruation of women of child bearing age impacts on our population size.
 - When women do not breastfeed, this increases our population size and therefore increases the cost to the public spending through health, education, welfare, roads, waste removal etc.
 - Global food poverty is high, and breastfeeding has been linked by many council's to locally and globally act as a protective and effective method of reducing food poverty for all children (Sustain 2015 and Unicef 2017c).
 - When formula feeding is used, we have further waste and pollution from not only a larger population, however also from the manufacturing and packaging of artificial formula milks. This increases our global burden and impacts on our UN sustainable Development goals (United Nations, 2015).



Source:https://r3a8snvjie-flywheel.netdna-ssl.com/wp-content/uploads/Business-Actionon-the-SDGs.png

 Breastfeeding promotes better health for generations, reducing time off work for parents caring for sick children, therefore keeping adults within the workforce. For those children who were breastfed; their future health is more positive, therefore impacting on their potential time off school, due to the public health impacts on childhood health as discussed above. Thus, enhancing education and impacting on future life chances and employability for breastfed children as adults.



Source: https://www.unicef.org/breastfeeding/

- Furthermore, Renfrew et al 2012 identified that Investment in effective services to increase and sustain breastfeeding rates is likely to provide a return within a few years, possibly as little as one year.
- Breastfeeding is recognised to be one of the most significant preventative health measures for our wider population health needs. The wider impact on our whole population, particularly in the UK, where we have significantly lower rates than our counterparts, is recognised to have a major impact on our population health.

5. Breastfeeding: The challenge

5.1 The UK is in a significant crisis due to lack of breastfeeding duration, in comparison to the global distribution of breastfeeding (Victora 2016).



Global Breastfeeding status at twelve months Source Victora 2016

- 5.2 Within Devon STP (Sustainability and Transformation Plan) footprint in some areas we previously have had a positive initiation rate in comparison to many areas within England. However, this remains very poor in comparison to our global counterparts. When considering wider Devon, at least a quarter of our population does not have breastfeeding initiated, however it is recognised that in some areas of Devon where deprivation is higher including Torbay and Plymouth, we have significantly lower rates impacting on our population uptake of breastfeeding. This means that at least a quarter of our population and at times much more than a quarter are not even starting to breastfeed.
- 5.3 Our breastfeeding rates both nationally and within Devon STP footprint at 6-8 weeks show a significant reduction in the number of babies who are still being breastfed.



Source: Public Health England, 2016.

5.4 In the UK perceptions surrounding breastfeeding suggest that breastfeeding is challenging to undertake and in many cases, breastfeeding is thought to be unnecessary, because formula milk is incorrectly viewed as very almost as close to breast milk (Public Health England, 2016).

5.5 The challenges for British mothers to continue to Breastfeed are complex and multifactorial.



Source: Public Health England, 2016.

- 5.6 Furthermore, challenges such as breast and nipple pain (Dennis et al 2014) and perception of low milk supply (Brown et al 2014) remain a frequently sited direct cause of breastfeeding cessation.
- 5.7 In addition to this for some babies' medical complications, muscle tone variations, muscle co-ordination and structural difficulties can add further complexities to the challenge of breastfeeding.
- 5.8 Societal and Cultural Impacts:

Breastfeeding is a learnt experience and our culture and social networks provides the structure to much of this learning and support. Women who are exposed to breastfeeding as a norm, will view breastfeeding as the norm. Women however who are exposed to a culture of bottle feeding, will view bottle feeding as the norm.

- It has been recognised that many parents feel huge pressure in relation to breastfeeding (Unicef, 2017b). The change the conversation campaign recognises that this pressure has had a huge impact on parents closing conversations regarding Infant feeding. Professionals have reported feeling restricted in participating in such conversations. A call to action has been issued by Unicef calling on central government to stop allowing individual women to take the blame for breastfeeding initiation and duration and asking that governments stand up and take responsibility in providing the support and infrastructure to influence and promote optimised Infant feeding.
- Public Health England confirmed that many mothers feel embarrassed breastfeeding in the presence of people they don't know (63%); 59% felt the same about their partner's family and 49% felt it about siblings and wider family members (Unicef 2017a). This is significant when we consider the aspiration for breastfeeding to be the norm within our country.

- Furthermore, Unicef 2017a, identified that 74% of Mothers have identified that breastfeeding could be painful, and this makes it challenging and often leads to cessation of breastfeeding. Pain during breastfeeding usually results from physical trauma, infection, or other specific breastfeeding conditions such as mastitis, which are mostly avoidable, and all treatable with appropriate and skilled support in the early postpartum period, or when the concern occurs (Wambach & Riordan 2014). We will not be able to address this if the support is not present, skilled, up to date and using the current evidence base, nor if we do not have a society of people who have experienced breastfeeding and learnt the art and skill of breastfeeding, which they can then pass on to future generations.
- Further barriers identified by mothers included concerns that breastfeeding could restrict them in undertaking activities that they wanted to undertake (51%); with a further misconception that was identified by 24% of mothers who believed breastfeeding could stop them exercising (Unicef, 2017a). This evidence's the ongoing misconceptions in relation to breastfeeding within our society, arguably impacted by a compromised knowledge base, as we know by example that a mother who is breastfeeding can continue a healthy exercise routine (Wambach & Riordan, 2014).
- Socio-demographics continue to impact on parental awareness and levels of knowledge regarding the health benefits of breastfeeding and how to access support. It is noted that there is a 45% difference in breastfeeding rates from the highest initiation, this being women who come from a professional occupation, in comparison to the lowest initiation, this being mothers who have never worked (Unicef, 2017a).
- Women would be encouraged to continue to breastfeed their baby when they
 return to work. Maternity leave and access to flexible working has meant that
 many mothers are able to breastfeed for longer periods; however, there can
 still be challenges. In a recent study only 16% of participants said that their
 employer offered facilities to express milk and only 8% said that they could
 breastfeed at work (Unicef, 2017a).
- Unicef 2017a have called on Workplaces to support mothers to breastfeed for longer, including in the Government's own departments where a recent series of Parliamentary Questions revealed a lack of available facilities for breastfeeding mothers (Unicef ,2017a).

5.9 Access to services:

In 2016 Unicef asked Infant feeding leads across Britain to report on current services available for mother's in their areas. The results evidenced significant barriers to breastfeeding:

- Unicef 2017a, reported that services that support breastfeeding mothers, have had significant capacity and resourcing issues. Unicef 2017a reported that 58% of respondents reported cuts to the Health Visiting service. Health Visiting is the universal service that interfaces with every child and is ideally timed and positioned to provide additional support in relation to Infant feeding. Locally we have been influenced by such cuts within the Public Health funding grant therefore, such cuts are instrumental in influencing our wider public health.
- Furthermore, Unicef 2017a, identified that 48% of participants reported closures of children's centre services. Locally we are seeing services moving towards a more targeted influence which will mean our universal reach will be less. This inevitably will have impact on breastfeeding rates and therefore public health in the future, as breastfeeding support was often channelled

through the children's centres but will be more targeted in its approach from April 2018.

- In addition to this 47% of respondents reported cuts to Infant feeding support groups (Unicef, 2017a). This inevitably will have a further impact on breastfeeding rates and therefore public health in the future. It has been recognised that organised structured breastfeeding support that is accessible to mothers does have an effect in supporting women to breastfeed their babies for longer periods of time (McFadden et al 2017) and removal of such support will impact.
- Meanwhile it was reported that a further 40% cut was made in Britain of one to one peer support programmes (Unicef 2017a). McFadden et al 2017 also highlighted that there were recognised benefits to this support being predictable, scheduled, relatively frequent (4-8 visits) and including ongoing visits with trained health professionals including midwives, nurses and doctors, or with trained volunteers including peer supporters.
- However, Unicef 2017a identified that specialist services did show an increase of 33%, which was welcomed and celebrated. For complex breastfeeding needs this is a very positive step, yet when we consider wider population health the influence of this is going to be smaller.



Source Unicef 2017a

- Recent evidence reviewed through a Cochrane review (McFadden et al 2017) concluded that, organised support does have a beneficial effect in supporting women to breastfeed their babies for longer periods of time.
- Mcfadden et al 2017 highlighted that there were recognised benefits to this breastfeeding support being predictable, scheduled, relatively frequent (4-8 visits) and including ongoing visits with trained health professionals including midwives, nurses and doctors, or with trained volunteers. The cuts within our services are reducing this nature of support.
- Renfrew 2012b also identified that a challenge occurs when additional breastfeeding support is not offered to all women as part of routine care; when services do not provide breastfeeding education and information to pregnant women, in relation to how to breastfeed and overcoming barriers to breastfeed; and when a multifaceted approach to provide a coordinated programme of interventions including;
 - Trained health professionals
 - Breastfeeding peer support programmes
 - > Joint working between peer supporters and health professionals.

does not occur.

- 5.10 Misinformation and Marketing
 - Many parents are unclear about healthy diet and nutrition for their children and breastfeeding is one element of that.
 - The lack of normalisation within society has led to a poor experiential base and poor knowledge base surrounding breastfeeding. Resulting from this lack of knowledge base and experience in society, a plethora of societal barriers in relation to breastfeeding, weaning and healthy eating has been constructed largely on misinformation. This has been evidenced to influence many elements of knowledge including medication and breastfeeding, confidence to evaluate if our babies are getting adequate breastmilk, dietary requirements for mothers, weaning age and content and fear of nutritional content (Unicef 2017a).
 - Furthermore, the marketing of baby formula questions the value of breastfeeding and causes confusion to not only breastfeeding mothers in relation to the value of breastfeeding but also influencing doubt from mothers regarding their ability to breastfeed. It also causes wide confusion amongst formula feeding parents about what milk to buy and what milk their babies need.
 - Millions of pounds are spent by formula companies in targeting parents. Sophisticated and often confusing advertising and marketing campaigns promote formula and early weaning products, therefore undermining breastfeeding and current guidance in relation to healthy eating and weaning practices for children onto solid foods.
 - The International Code of Marketing of Breastmilk Substitutes (the Code) aims to restrict the advertising of food and drink intended for babies. However, the code has only been partially implemented within the UK and therefore does not ensure that all parents, whether breastfeeding, partially breastfeeding or formula feeding, are protected from harmful marketing by being given only scientific, factual and evidence-based information about Infant feeding (WHO 1981).

6 Donor Milk Provision

- 6.1 The WHO (2003) highlighted the importance of breastmilk for all babies. The promotion of a baby receiving its own mother's breastmilk, is recognised to be the best option for all babies (Edmond and Bahl 2007). However, if a mother cannot or does not breastfeed, the WHO (2003) then recommends that donor breastmilk should be the next choice.
- 6.2 We recognise that maximising breastfeeding culture and support through the aims of this strategy, is an essential part of enabling a mother to provide her baby with her breastmilk.
- 6.3 For our vulnerable babies who are born early or small, there is robust evidence highlighting the impact breastmilk has on reduction in pain (Maite et al 2017, Klingenberg et al 2011), reduction in mortality, and reduction in short term and long-term morbidity (Rice et al 2010, Morely et al 2000).
- 6.4 The precious drops milk bank runs from Southmead hospital in Bristol. It provides pasteurised donated breast milk to the 12 neonatal units in the South West. The depot donor milk bank run by HBUK in Tiverton, is a satellite centre for recruiting and

collecting raw donated breast milk, either through meeting the mothers directly or through the neonatal units in the South West.

6.5 The Precious drops milk bank has been running for a year and more milk has been collected and pasteurised as a result. There is distribution of donors across the area. Healthy Babies UK provide a home from home feel, support the bf journey, provide equipment and complete the health questionnaire and bloods required from the donor mums. They work in partnership with the charities freewheelers and NICU support who have access to the building to collect the milk for pasteurising.

7 **Responsive parenting: Responsive feeding**

- 7.1 Unicef (2017d) identify that "Responsive breastfeeding involves a mother responding to her baby's cues, as well as her own desire to feed her baby. Crucially, feeding responsively recognises that feeds are not just for nutrition, but also for love, comfort and reassurance between baby and mother".
- 7.2 For some mothers the use of a feeding bottles to feed their baby is part of everyday life. Some mothers give expressed breastmilk through an Infant feeding bottle, whereas mothers who partially breastfeed, and mothers who formula feed their babies might use an Infant feeding bottle to provide their baby with formula milk. These mothers also need to respond to their babies therefore utilising a form of responsive Infant feeding.
- 7.3 Ainsworth, 1978, recognised the importance for all parents in utilising what she called parental sensitivity. This included recognising a baby's signals, interpreting these signals and responding to the signals in a sensitive and responsive manner.
- 7.4 The Solihull Approach (2015) also recognises the need for reciprocal parenting of children. Such actions are described as a dance whereby the mother and baby respond to each other's innate signals, in order to achieve a reciprocity in their actions and therefore their behaviour and feelings.
- 7.5 For mothers who breastfeed it is often recognised that feeds are not just for nutrition, but also for love, comfort and reassurance between baby and mother. For mothers who use an Infant feeding bottle, this dance is equally important, if they are going to meet their babies current and future emotional and nutritional needs (Black & Aboud 2011).
- 7.6 When breastfeeding, our hormones often facilitate such responsiveness through the oxytocin cycle, however some mothers can struggle with responsive feeding. Whilst we recognise that breastfeeding builds loving relationships, we also recognise that in some cases some mothers who are breastfeeding require additional support to obtain this instinctive responsiveness.
- 7.7 Equally, whilst we know that Oxytocin promotes this relationship through breastfeeding, we recognise that mothers who are not breastfeeding are often responsive when feeding their babies and are also responsive of their babies needs in building a loving relationship. However, we also recognise in some cases some mothers who are not breastfeeding require additional support to obtain this instinctive responsiveness.

- 7.8 The impact of missing these innate signals and not responsively feeding our babies, however we feed them, can be significant both emotionally and physically for both mother and baby.
- 7.9 Unicef (2017d) recognise that the British culture does not enhance responsive feeding, largely due to our strong cultural attitudes in relation to what is perceived to be a good baby. Furthermore, it recognises that the routines perceived to evidence the perception of a good baby within our society, do not largely allow for intuitive parenting.
- 7.10 Unicef (2017d) also recognise that In the UK we have a strong bottle-feeding culture; by one week of age over half of all babies will have received formula milk via a bottle, and by six weeks this rises to three quarters of all babies. The challenges of this in relation to breastfeeding have already been discussed above, however when considering responsive feeding, the challenges remain multifactorial. In its purest form however the guidance present on a tin of formula milk, sets structure regarding the space between feeds and the amount a baby should take based on their weight. This potentially leads to a lack of confidence in bottle feeding parents to move away from the instructions upon the formula powder tin. Unicef (2017d) recognised that a variation of responsive feeding is required for bottle feeding parents because true responsive feeding as per there definition, is not possible when bottle feeding, as formula milk misses many properties such as leptin, that are present within breastmilk that are believed to give a protection in relation to baby's regulating their hunger.
- 7.11 Therefore this strategy recognises the need for parents to have an awareness of safe information regarding responsive Infant feeding, containing the Unicef 2017d knowledge base that mothers are supported to tune in to feeding cues and to hold their babies close during feeds. Offering the bottle in response to feeding cues, gently inviting the baby to take the teat, pacing the feeds and avoiding forcing the baby to finish the feed in order to help to make the experience as acceptable and stress-free for the baby as possible, as well as reducing the risk of overfeeding. Furthermore, this strategy recognises the importance that professionals recognise and share information with parents regarding the importance of supporting parents to give most of the feeds themselves (particularly in the early days and weeks), as this will help them to build a close and loving relationship with their baby and help their baby to feel safe and secure.
- 7.12 In addition, this strategy recognises that parents need the information base to enable them to recognise the risks regarding the unsafe making up of formula milk, therefore parents receive appropriate information regarding sterilising, choosing of appropriate first milks, making up formula feeds, and appropriate storing and transporting of formula milk and expressed breastmilk. As present within the Start for Life Guide to bottle feeding leaflet.



Available from:

<u>https://www.unicef.org.uk/babyfriendly/wpcontent/uploads/sites/2/2008/02/start4life_g</u>uide_to_bottle_-feeding.pdf

8. Healthy Start Voucher and Vitamin Scheme: The Current Evidence and Challenge

- 8.1 Healthy Start is a UK-wide government scheme, aiming to improve the health of lowincome pregnant women and families on benefits and tax credits.
- 8.2 The Healthy Start scheme provides vouchers for means tested low income families, to put towards the cost of classified healthy foods. It also provides free vitamins for pregnant women or postnatal women (up until their child's first birthday) and children under 4 years old within these families, to enhance their nutritional wellbeing.
- 8.3 Research undertaken by The Scientific Advisory Committee on Nutrition (2008) suggests that:
 - 8% of children under five in the UK don't have enough vitamin A in their diet.
 - Families in lower-income groups tend to have less vitamin C in their diet.
 - All pregnant and breastfeeding women and young children are at risk of vitamin D deficiency. (teenagers, younger women and those from ethnic minorities are particularly at risk).
- 8.4 The mother's vitamins consist of:
 - Folic acid: which reduces the chance of the baby having spina bifida, a birth defect where the spine does not form properly.
 - Vitamin C: helps maintain healthy tissue in the body.
 - Vitamin D: helps the mother's body in absorbing calcium and so supports the development of the baby's bones.
- 8.5 The children's vitamins are currently recommended for children from six months old, up until their fourth birthday, who are having less than 500ml of infant formula or are breastfed (these vitamins are already added to the formula, therefore babies drinking more than 500ml of formula milk will be obtaining the recommended amount via the formula milk).

- 8.6 In September 2018 this guidance is likely to change, therefore bringing the Healthy Start initiative in line with the new SACN recommendations on vitamin D from birth. However, there are calls for further research in order to inform this process further, whilst balancing up known risk factors and the influence these have on the wider universal population (Wright 2017).
- 8.7 The children's vitamins at present consist of:
 - Vitamin A: for growth, vision in dim light and healthy skin
 - Vitamin C: helps maintain healthy tissue in the body
 - Vitamin D: for strong bones and teeth.



- 8.8 Within the United Kingdom the responsibility to provide and monitor Healthy Start Vitamins comes under the Local Authority and Public Health Devon undertake this role.
- 8.9 Lucas et al 2013, identified that the uptake of the Healthy Start scheme vouchers, which can be exchanged for healthy foods is recognised to be generally high, for the food voucher financial element of the scheme. Data provided by the Department of Health evidenced that the estimated take-up rates tend to be lower in less-deprived areas. The Healthy start Alliance confirmed in 2016 that that the take up on this element remains around 70%.

	Families who qualify for HS	Families sent HS vouchers	Take-up rate
Sep-15	481,450	352,039	73.1%
Oct-15	481,053	349,565	72.7%
Nov-15	480,119	346,917	72.3%
Dec-15	478,131	341,629	71.5%
Jan-16	474,014	338,588	71.4%
Feb-16	471,140	336,211	71.4%
Mar-16	468,643	334,960	71.5%
Apr-16	467,726	332,463	71.1%
May-16	466,786	329,235	70.5%
May-16	465,600	326,095	70.0%
Jun-16	461,653	323,984	70.2%
Jul-16	460,298	321,384	69.8%
Aug-16	458,746	307,765	67.1%
Sep-16	436,848	306,685	70.2%
Oct-16	440,328	307,141	69.8%

Source: http://healthystartalliance.org/about-healthy-start/4587182409

8.10 However by contrast Lucas et al 2013, identified that parents were seldom using the Healthy Start vitamin element of the scheme. The uptake nationally of the Healthy Start Vitamin element of the scheme is recognised to be poor. The vitamin uptake

nationally is believed to be between 2-10% (Department of Health 2016a), however the government at this time acknowledged that obtaining data is challenging, as it is a fluctuating benefit dependent on people's financial situation.

- 8.11 Lucas et al 2013, identified reasons for poor uptake of the vitamins as the following: Access:
 - Parents expected the Healthy Start vitamins to be available in high street pharmacies.
 - Parents stated that they were confused about where vitamins could be accessed.
 - Health professionals were also unsure of where they were able to obtain the Healthy start vitamins.
 - Families themselves felt the best solution would be to be able to collect vitamins from supermarkets and high street pharmacies.

Knowledge:

- There was a greater perceived need for vitamins during pregnancy.
- More women tried to locate Healthy Start vitamins during pregnancy than afterwards, due to lack of knowledge regarding post pregnancy vitamin need.
- Some parents (particularly the under 18's, but not exclusively) do not have awareness that they need to notify Healthy start once their baby has been born and therefore drop out of the scheme unintentionally.
- A small number of breastfeeding mothers didn't claim vouchers because they didn't perceive a need.
- While both midwives and health visitors offered nutrition advice as part of their usual role, most were not connecting this to the potential of Healthy Start vouchers to increase the amount of fruit and vegetables families buy. Consequently, most parents reported receiving minimal information from health professionals about how they could use their food vouchers to improve their family's health. Therefore, potentially disempowering them from being able to make healthy nutritious meals for their children and not enabling further discussion of vitamin intake.
- In most of the sites there were limited other nutrition services (such as cookery classes, or diet advice) available, and links were not made to the Healthy Start scheme.

Systems:

- Nursery nurses working as part of the health visiting teams have often replaced health visitors in child health clinics. They are able to signpost to the scheme, however are not registered Health Professionals, therefore they are not able to sign applications for Healthy Start Vitamins.
- The Healthy Start phone line, used for administrative contact with the scheme, worked well for most parents, but was reported to be expensive to call especially for families who only had mobile phones.
- General Practitioners had no training on the scheme and therefore a low knowledge base. These are health practitioners who also encounter many vulnerable families.
- Resolving the low uptake of Healthy Start vitamins would likely require both local and national action, supported by good promotion by frontline staff, and would likely have budget implications.

Personal Situation

- Families with fluctuating incomes can struggle to ascertain means criteria for the scheme at variable times.
- Families with chaotic lives find it more difficult to sign up for the scheme.
- Second English speaking families struggle to engage with the scheme.
- Embarrassment was considered but not highlighted as a factor within the barriers regarding healthy start vouchers.
- 8.12 However Lucas et al (2013) also identified that the majority of midwives and health visitors nationally reported that Healthy Start fitted with their remit to promote maternal and child health. They regularly encouraged application and countersigned forms (Lucas et al 2013).
- 8.13 Furthermore, Lucas et al 2013 identified that professionals had good knowledge of the aims of the scheme and viewed it as a financial and nutritional safety net; ensuring low income families always had access to healthy food.
- 8.14 Frontline staff are successfully signing up families to the scheme, but the links between the support and advice they provide on health and nutrition and Healthy Start vitamin influence requires strengthening (Lucas et al 2013).
- 8.15 Our children's centres across Devon stock the Healthy start vitamins for exchange.
- 8.16 Within Devon, Torbay and Plymouth our vitamin uptake reflects the poor national uptake.

9. Appropriate introduction to solids and subsequent healthy diet: The current evidence

- 9.1 Within the United Nations convention on the rights for children, every infant and child have the right to good nutrition (United Nations, 1989).
- 9.2 The WHO 2017 identified that globally only a few children receive nutritionally adequate and safe complementary foods; in many countries less than a fourth of infants 6–23 months of age meet the criteria of dietary diversity and feeding frequency that are appropriate for their age.
- 9.3 The WHO 2017 recognised that around the age of 6 months, an infant's need for energy and nutrients starts to exceed what is provided by breast milk (or formula supplementation), and in most cases complementary foods are necessary to meet the child's nutritional requirements. For our premature babies Bliss (2017) recognises that research is divided as to exactly when the best time is to wean a premature baby. Bliss (2017) suggests that many of the studies into weaning premature babies agree that it is very hard to choose a single age at which all premature babies should be weaned, because their situations will all be very different. Some health professionals say that four months corrected age is the youngest age a premature baby should be weaned and then only if they are showing signs that they are ready to feed. In these cases, medical and dietetic guidance will be essential.
- 9.4 Furthermore, evidence highlights that most infant of this age are not only nutritionally ready, but also developmentally ready for other foods. If complementary foods are not introduced around the age of 6 months, or if they are given inappropriately, therefore suggesting a time or stage when the child is not ready, an infant's growth may falter, and this can impact on current and future health and wellbeing (WHO 2017).

- 9.5 Infants are recognised to require enough energy (calories) to grow and be active, and enough nutrients (protein, fat, carbohydrate, vitamins and minerals) to ensure that they remain healthy, can fight infections, be active and develop to reach their full physical and intellectual potential (The Caroline Walker Trust, 2011).
- 9.6 The Department of Health 2017 highlighted that the introduction of healthy foods at the point of weaning onto solids, will help lay the foundations for healthy growth and development.
- 9.7 Research in 2012, within the United Kingdom, suggested that the current diets of some children fail to achieve minimum nutrient requirements and therefore could impact on future health and wellbeing (Westland & Crawley 2012). This was further supported by research undertaken by Peachey, Smith and Sharma (2013), who identified that more than half a million children in the UK are now living in families who are unable to provide a minimally acceptable diet.
- 9.8 The prevalence of childhood obesity has increased significantly in the last two decades and in 2012 it was identified that 1 in 5 children aged 4–5 years is overweight or obese (HSCIC 2012).
- 9.9 Obesity is defined as a condition of excess body fat, to the extent that it may have an adverse effect on health (SACN and RCPCH 2012).
- 9.10 NICE 2014 recommend the use of the BMI (adjusted for age and gender), as a practical estimate of adiposity in children and young people. They raise caution however in the interpretation of the BMI, due to it not being a direct measure of adiposity and suggested linking this measurement to the 1990 BMI charts to give age and gender specific information.
- 9.11 The National Child Measurement programme indicates nationally the following trends:
 - The prevalence of obesity has increased since 2015/16 in reception age children but remained similar in year 6 children.
 - Over a longer period of time, obesity prevalence is lower for reception year compared to 2006/07. However, it was higher for year six in comparison to 2009/10 data.
 - As previously identified there is a strong correlation between deprivation and obesity.
 - (NHS Digital, 2017, NCMP Child Measurement England 2016/17 School year).
- 9.12 Nationally we note a significant increase in obesity between reception through to year 6 and a slight increase within underweight children in the same period of time.



Source: NHS Digital, 2017, NCMP Child Measurement England 2016/17 School year

9.13 The comparison of areas across Devon indicates that the South West area has a lower percentage of obesity. However, there are still significant levels of children who have a health and wellbeing risk linked to their future health due to obesity.



Source: NHS Digital, 2017, NCMP Child Measurement England 2016/17 School year

- 9.14 However we also know that obesity is only one indicator of a poor nutritional state and a healthy diet consists of a correct balance to meet the overall nutritional needs of that child.
- 9.15 Recent dietary surveys have highlighted that intakes of several nutrients are lower than recommended among children aged 12–35 months, including iron and vitamin D, raising concerns about the nutritional status of children in the UK (Alderton, 2014).
- 9.16 NICE (2017) are now calling for all children under four years to receive a daily supplement of Vitamin D.
- 9.17 Consideration has also been made in relation to how climate change will impact on human health and food sources over the coming decades (Westland & Crawley 2012). In considering healthy sustainable diets for children it is essential that we link up with adult based agenda's that are focusing on sustainability and food poverty

9.18 Food banks have been identified as offering an ever-growing service within the UK, that supports many of our most vulnerable population's dietary intakes, including many children.

10. Appropriate introduction to solids and subsequent healthy diet: The Challenge

- 10.1 Services are becoming increasingly targeted and therefore wider generation of parents are likely to gain weaning support from parents and peers, who's experiential knowledge might consist of out of date guidance, regarding weaning age of children and weaning practice.
- 10.2 The UK marketing laws regarding baby food allows the sale of baby food products labelled from the age of four months. This gives a confusing message which contravenes the UK guidance regarding 6 months weaning.
- 10.3 The marketing industries have a significant influence on Infant feeding, which is backed by significant financial support.
- 10.4 We have already identified that in many areas there were limited other nutrition services (such as cookery classes, or diet advice) available, therefore limiting children services supporting healthy nutrition.
- 10.5 Many parents are returning to work and therefore rely on child care provisions to feed their child. This can leave a gap within the family diet, as the parents might be in a pattern of convenience meals for themselves relying on the child care providers to consider healthy nutrition for their child. Once the child is aged 4 and attends school then this pattern of eating changes substantially with the responsibility returning to the parent.
- 10.6 Food poverty is impacting on our children's diet; therefore, we need to ensure that parents obtain information and support that enables them to adequately feed their children.
- 10.7 Policy in relation to diet is often adult based and services that we direct adults to in relation to healthy lifestyles, often do not have a child element to it. We need to address the issue of healthy diet to the family taking in the strands of different members.
- 10.8 Mixed messages remain in relation to the introduction of allergy linked food groups, which have previously suggested a window of introduction being essential to prevent allergy. Professor Lack (2015), the lead investigator from the Leap trials has summarised that "For decades allergists have been recommending that young infants avoid consuming allergenic foods such as peanut to prevent food allergies, trial findings suggest that this advice was incorrect and may have contributed to the rise in the peanut and other food allergies". This causes doubt in parents and professionals minds alike. Furthermore, the information regarding such trials as the EAT trial have been perceived in a variety of ways, however Professor Wright confirms that the evidence suggests weaning at around or close to 6 months continues to be the appropriate time for introduction to solids for most children (SACN 2017) (Wright, 2017).
- 10.9 Furthermore, the British Society of Allergy and Clinical Immunology will shortly be releasing Health Care Plans and Parent information sheets to further clarify guidance

regarding to weaning in children at high risk of allergies. The forthcoming advice suggests that when babies start complementary foods, the weaning diet should include peanut, tree nuts, seeds, dairy, fish, sea food and wheat. The guidance suggests that these foods should be introduced one at a time aiming to have the full range introduced before 12 months of age. Furthermore, there is recognition that delaying the introduction of these foods beyond 12 months may increase the risk of food allergies. These foods, once introduced, should be a regular part of babies' usual diet to reduce the risk of later development of allergy to these foods.

- 10.10 Furthermore the guidance highlights that If a baby has eczema or already has a food allergy then there is evidence that introducing cooked egg and peanut as early as possible from the moment of weaning can prevent these allergies. This would include one whole egg over the course of a week and the equivalent of 2 level teaspoons of age appropriate peanut product over a week. Further guidance would be sought on this by dietetic departments for at risk babies.
- 10.11 In addition to this the guidance highlights that no allergenic foods should be avoided in pregnancy, and two portions of oily fish a week (but not more) m ay reduce the risk of sensitisation to allergenic foods. Nor should mothers avoid allergenic foods whilst breast feeding, as this has NOT been shown to reduce allergies in the infant (Stiefel et al 2017)

11 Other factors Impacting on Health

11.1 It is widely recognised that many factors impact on health and wellbeing of children and young people. It is impossible to address all of these within one strategy. Therefore, whilst acknowledging this factor here, it is important to consider associated pathways/ strategies in relation to other indicators of health and wellbeing, such as, but not exclusive to mental wellbeing, physical activity, disease prevention, readiness to learn etc.

12 The Strategies Aims



Breastfeeding becomes the largest feeding method across our Devon population for the first 6 months of life and then accompanies complimentary foods up to two years and beyond. Families and communities make healthier feeding choices, which promote optimal health and wellbeing for all children and their families for life.

Families receive recognition for their personal situations and sensitivities, whilst being supported to optimise healthy choices, regarding Infant feeding for their children and consequently for future generations.

The infrastructure within our communities, workplaces, public and private organisations at the very minimum, protect, support and promote breastfeeding, and healthy eating. The infrastructure, sustains a wider commitment to not only individual children and mother's public health, but also to the sustainability of our future generation's health and wellbeing, our wider financial stability and our future environmental stability.

Infant feeding has a smooth strategy in place, which provides strategic consistency to the support received by families, in any period of changeable and transitional times.

13 How we will work towards achieving these above aims

OBJECTIVE ONE: Breastfeeding is accepted by all, as the method to feed babies

What have we achieved so far?

• Developed an Infant feeding strategy to support the normalisation of breastfeeding.

What further steps do we need to take?

- Develop a wider Devon charter mark scheme in recognition for local facilities providing services to families that support breastfeeding.
- Develop a wider Devon Breastfeeding Employers charter mark to support women in the workplace.
- Develop a wider Devon Nursery and School charter mark that supports breastfeeding.
- Actively engage with organisations, industry, and commerce to adopt policies and practices that support breastfeeding, through engagement of public health strategies.
- Continue to promote the underlying values of this Infant feeding strategy by raising the profile of breastfeeding, with stakeholders and other appropriate people including community groups.
- Consider the development and investment into a marketing campaign that supports breastfeeding as the norm.
- Develop and deliver educational programmes in relation to vitamin uptake, healthy diet and breastfeeding across all sectors of society.

We will know we have achieved this when:

- We see a rise in breastfeeding rates evidencing that more people are breastfeeding as it is recognised to be more optimal.
- In mapping our charter marks, we will evidence growth within a community movement towards breastfeeding being accepted as optimal within our community environments.

OBJECTIVE TWO:

Consistent evidenced based Information is available which supports and promotes healthy feeding choices for all children.

What have we achieved so far?

- Peer support networks available in some of our areas such as Exeter, Tiverton and Teignmouth.
- Infant feeding clinics are available by appointment for more complex feeding challenges, initially offered by Infant Feeding Midwives at RD&E and Torbay & South Devon NHS Foundation Trust, and then from day 10 postnatal offered by Virgincare Special Interest Health Visitors (Infant feeding) in four locations across Devon.
- Specialist speech and Language Therapy Dysphagia (feeding) team are available from RD&E to support families whose babies have mechanical co-ordination feeding difficulties.
- We celebrate many good practices within Devon regarding Infant feeding practice. At present within the county we celebrate the following:
 - Full Baby Friendly Initiative accreditation for our Royal Devon & Exeter Neonatal Unit
 - Full Baby Friendly Initiative accreditation for our Torbay and South Devon Health Care Trust maternity unit
 - Full Baby Friendly Initiative accreditation for our Torbay and South Devon Health Care Trust Health Visiting service
 - Full Baby Friendly Initiative accreditation for our Virgincare Devon Integrated Children's Services
 - Stage two Baby Friendly Initiative for our North Devon District Hospital
 - We also have varying levels of support within the private and voluntary sector within Devon.

Full accreditation to BFI enables us to work towards robust gold standard care within a measured and accountable framework. It provides a research base and a national focused drive that supports localities to develop further in challenging times not just the provision of breastfeeding services for families but also to change the wider culture of breastfeeding from both top down and bottom up approaches.

What further steps do we need to take?

- Explore building our peer support network further and postnatal breastfeeding support mechanisms in order to expand and develop our mother to mother support, through working alongside voluntary peer supporters in a safe and coordinated manner.
- Consider the development of a peer supporter training programme that allows equity across the region and would allow longevity of such training and management of volunteers providing robust support and supervision.

- Reconsider antenatal education across Devon, to ensure that it is in line with this strategy, the current evidence base, and is evaluated to be beneficial to parents. Furthermore, to consider the inclusion of vitamin uptake and healthy diet choices alongside promotion of breastfeeding.
- Maintain the important universal contacts families have with Health and children centre professionals, complex support services, and any existing peer support networks, whilst considering what additions we can make to this offer within financial constraints that might improve healthy eating for children.
- Consider a programme to highlight healthy start uptake and drive this scheme forward.
- Consider nursery and school healthy eating schemes, where parents, staff and children are able to obtain healthy eating information from a variety of services including the on-going early years settings. Alongside this consider the development of a Devon Healthy eating educational charter mark.
- Development of a structured universal breastfeeding support programme that is predictable, appropriate, evidenced based, timely but utilising current resources perhaps utilised in a more joined up, partnership manner.
- Consideration of further promotion of the Start in life breastfeeding app and the Change4Life sugar and recipe app.
- Actively engage with organisations, industry, and commerce to adopt policies and practices that support healthy eating, through engagement of public health strategies such as SugarSmart.
- Develop and deliver educational programmes in relation to vitamin uptake, healthy diet across all sectors of society.
- Develop a system, where we are able to monitor what information parents are given regarding healthy eating in order to ensure that this is robust, and evidence based.

We will know we have achieved this when:

- Our NCMP data show an improvement in healthy weight of children at reception and year 6.
- Our breastfeeding data evidences that he initiation and duration of breastfeeding has increased.
- Our Healthy start data evidences an increase in the uptake of Healthy Start vitamins.
- Parents reflect accurate evidence base information.

OBJECTIVE THREE: Families feel safe, and confident to explore their Infant feeding and family diet options openly and feel supported in making the best choice for their family.

What have we achieved so far?

- Making Every Conversation Count (MECC) training is being delivered across the STP footprint and is being delivered to public and community sector organisations to whole workforces. Very brief opportunistic MECC conversations will help prevent long term conditions and improve the management of others in empowering individuals to selfmanage their lifestyles.
- Families are offered opportunities to discuss healthy eating choices at all contact points with Public Health Nursing services.

What further steps do we need to take?

- Develop a culture of openness when discussing infant feeding, taking away judgement, however maintaining robust evidence base, in order to promote health and wellbeing for all children within a context of sensitivity.
- Continue to deliver MECC to Devon workforces including maternity and children and young people services.
- Engage further with families within the Devon area so that we can recognise positive practice and identify gaps. This is a piece of work that needs to be developed at the outset of this strategy, as it will then inform the strategy and be the spine of the strategy.

We will know we have achieved this when:

• Families discuss feeding openly. This will be evidenced within our BFI audits.

OBJECTIVE FOUR:

Communities, both organisational and social at the very minimum protect, promote and project the importance of positive infant feeding choices.

What we have we achieved so far?

- Development of the Infant Feeding Alliance group to support development of the Infant feeding strategy.
- Strong provider and commissioner service attendance at the NIFN meetings.
- Implementation of the BFI accreditation within our maternity services and health visiting services.

What further steps do we need to take?

- Consider areas that would benefit from the development of Infant feeding / Breastfeeding cafes.
- Develop potential peer support ran Infant Feeding breastfeeding cafes.
- Robust and strategic leadership maintained throughout the strategy group to ensure clear responsibility for action.
- Promotion of shared strategic ambition across the STP footprint to promote, protect and support healthy infant feeding.
- Ongoing prioritisation of attendance at Strategic meetings.
- Engagement with all sectors of support and families, in order to ensure a collaborative strategy that belongs to all.
- Community BFI accreditation.
- Change4life campaign to enhance commercial engagement regarding healthy food choices.

We will know we have achieved this when:

- We meet Objective number one.
- We evaluate that organisations have adopted robust policies supporting our objective.
- Communities show resilience in supporting healthy feeding choices, including supporting campaigns that enhance healthier food and nutrition environments.

OBJECTIVE FIVE: Systems that support our Infant feeding are evidence based and evaluated to ascertain and inform if we are making a difference.

What have we achieved so far?

- An initial review was undertaken by Public Health Devon in September 2017. It compared statistical geographical areas of need, alongside provision of Infant feeding support available from Public Health Nursing, Children's Centres and third sector providers. It provided the following analysis:
 - Statistically there were no strong correlations with Infant feeding rates and available support. Where rates were higher and support was higher for example South Hams, we have extrinsic community and cultural variables that are likely to be impacting on breastfeeding initiation and duration.
 - For our population size and birth rate we are not reaching the level of breastfeeding support stated within the NICE guidance 2008.
 - Furthermore, our support in Devon is inconsistent within our areas and not based on area need. The areas of higher need (lower breastfeeding rates and higher socio demographic needs) are not always the areas that have high levels of peer support or additional breastfeeding support.
 - Our breastfeeding rates are good compared to England however they could be better. The public health impact is so high that the question would be; why would we settle at anything less than aiming for 100% breastfeeding rates?

Taken from Public Health Devon, October 2017, Infant feeding and where our Devon approach is at present.

- Established data collection systems that enable us to analyse need and evaluate effectiveness of intervention.
- Standard Operating procedures and policies are available via our provider organisations for Infant feeding and healthy eating.
- BFI Accreditation as follows:
 - Full Baby Friendly Initiative accreditation for our Royal Devon & Exeter Neonatal Unit
 - Full Baby Friendly Initiative accreditation for our Torbay and South Devon Health Care Trust maternity unit
 - Full Baby Friendly Initiative accreditation for our Torbay and South Devon Health Care Trust Health Visiting service
 - Full Baby Friendly Initiative accreditation for our Virgincare Devon Integrated Children's Services
 - Stage two Baby Friendly Initiative for our North Devon District Hospital
 - We also have varying levels of support within the private and voluntary sector within Devon.
- Within the South West a depot donor milk bank was launched in March 2017 leading to a total donation of 144.5 litres so far, through a robust safe recruitment process of lactating mothers.

What further steps do we need to take?

 Build on this data collection systems to ensure that they are robust, fit for purpose and provide effective and meaningful insight into family's needs, alongside service needs.

- Ensure ongoing and further analysis of this data in a meaningful and unbiased manner which measures outcome driven interventions.
- Participate in research, evaluation and reporting of activities which can then support and inform commissioning decisions.
- Gain further insight into client feedback and user experience to further develop our understanding and response to infant feeding needs and wider training needs across the STP region.
- Consider alternative options in relation to increasing the Healthy Start vitamin uptake range.
- Utilise this information in order to inform future direction of this strategy.
- Ensure appropriate, effective, evaluation of training and services through evaluation of the impact of this evaluation.

We will know we have achieved this when:

- Our data evidences that we are improving the heathy eating choices of children and young people aged conception to 4.
- Our ongoing evaluation through the Infant Feeding strategy enables us to understand and evaluate the progress of the aims of this strategy.

14 References

Acta Paediatrica (2015) Special Issue: Impact of Breastfeeding on Maternal and Child Health, December, Volume 104, *Issue Supplement* S467, Pages 1–134.

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Erlbaum.

Alderton, S., 2014. Do we need free vitamins for all babies and young children in the UK? *Nutrition Bulletin*, *39*(2), pp.187-194.

Amitay, E.L. & Keinan-Boker, L. (2015). Breastfeeding and Childhood Leukemia Incidence: A Meta-analysis and Systematic Review. *JAMA Pediatrics*, 169(6):151025. doi:10.1001/jamapediatrics.2015.1025

ARHP 2009 Health Matters Fact Sheet, Breastfeeding Lactation Amenorrhea Factsheet available from <u>https://www.arhp.org/Publications-and-Resources/Patient-Resources/Fact-Sheets/Breastfeeding</u>

Black, M. Aboud, F (2011) Responsive feeding is embedded in a theoretical framework of responsive parenting 1-3, The Journal of Nutrition, Symposium: Responsive Feeding-promoting healthy growth and development for Infants and Toddlers, 490-494

Brown, A. (2017) Breastfeeding as a public health responsibility: A review of the evidence. *Journal of Human Nutrition and Dietetics*. <u>https://doi.org/10.1111/jhn.12496</u>

Brown, C.R., Dodds, L., Legge, A., Bryanton, J. and Semenic, S., (2014). Factors influencing the reasons why mothers stop breastfeeding. *Can J Public Health*, *105*(3), pp.e179-85.

Cattaneo, A., 2004. Protection, promotion and support of breastfeeding in Europe: a blueprint for action. *EU Project contract N. SPC*, 2002359.

Chowdhury, R. et al (2015). Breastfeeding and maternal health outcomes: a systematic review and meta-analysis. *Acta Paediatrica*, Special Issue: Impact of Breastfeeding on Maternal and Child Health. Volume 104, Issue Supplement S467, pages 96-113.

Dee DL, Lee LC, Grummer-Strawn LM, (2007) Associations between breastfeeding practices and young children's language and motor skill development, *Pediatrics*, 118 (supp 1) 592-598

Dennis, C.L., Allen, K., McCormick, F.M. and Renfrew, M.J., 2008. Interventions for treating painful nipples among breastfeeding women. *Cochrane Database of Systematic Reviews [Internet]. Chichester, UK: John Wiley & Sons, Ltd.*

Department of Health (2016a) *Healthy Start Webinar* 7 December 2016 available from: judith.hind@dh.gsi.gov.uk

Department of Health (2016b) *Improving outcomes and supporting transparency Part 2* [ONLINE]

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/545605/PHOF Part_2.pdf Department of Health (2016c) *Public Health Outcomes Framework 2016/2019* London: The Stationary Office [ONLINE] <u>https://www.gov.uk/government/publications/public-health-outcomes-framework-2016-to-2019</u>

Department of Health (2017) *Birth to Five Book,* Available [ONLINE] <u>http://www.publichealth.hscni.net/publications/birth-five Accessed 08/11/17</u>

Dietert RR, (2013), Natural Childbirth and Breastfeeding as preventive measures of Immune – Microbiome Dysbiosis and misregulated inflammation, *Journal of ancient Diseases and Preventative Remedies*, No 103. Doi: 10.4172/2329-8731.1000103

Dietert, RR, and Dietert JM. (2012), The Completed Self: An Immunological View of the Human-Microbiome Superorganism and Risk of Chronic Diseases. *Entropy* 14 (2012): 2036–65, doi:10.3390/e14112036.

Drane DL (2003) Breastfeeding and specific language Impairment, *Dissertation Abstracts International*, 65 (01), UMI No. 3118535)

Eccleson (2017) Using the Brazelton approach to support Babies and Parents, Powerpoint [ONLINE] <u>http://www.unitetheunion.org/uploaded/documents/Eccleson-</u> <u>Using%20the%20Brazelton%20Approach%20to%20Support%20Babies%20and%20Parents</u> 11-11940.pdf Accessed 19/01/18

Edmond K, Bahl R (2007) Optimal feeding of low-birth-weight infants: technical review. WHO.

EU Project on Promotion of Breastfeeding in Europe. (2004) *Protection, promotion and support of breastfeeding in Europe: a blueprint for action.* (2004) European Commission, Directorate Public Health and Risk Assessment, Luxembourg, 2004. [ONLINE]: <u>http://europa.eu.int/comm/health/ph_projects/2002/promotion/promotion_2002_18_en.htm</u>

Executive, S., 2005. The Mental Health of Children and Young People: A framework for promotion, prevention and care. *Healthier Scotland. Scottish Executive*.

Hansen K (2016) Breastfeeding: a smart investment in people and in economics, *The Lancet.* Volume 387, No. 10017, p416, 30 January

Healthy Start (2017) [ONLINE] https://www.healthystart.nhs.uk/ Accessed 14/11/17

Harrison L J & Mcleod S, (2010) Risk and protective factors associated with speech and language impairment in a nationally representative sample of 4 – 5 year old children , *Journal of speech, language and hearing research*, 53 (2) 508-529.

HSCIC (Health and Social Care Information Centre) (2012) National Child Measurement Programme: England, 2011/12 school year [online] Available at: <u>https://.catalogue.ic.nhs.uk/publications/public-health/obesity/nati-chil-meas-prog-eng-2011-2012-rep.pdf</u> (accessed 6 December 2013).

Horta, B. L. et al (2015). Breastfeeding and intelligence: a systematic review and metaanalysis. Acta Paediatrica, Special Issue: *Impact of Breastfeeding on Maternal and Child Health. Volume 104,* Issue Supplement S467, pages 14-19. Klingenberg C, Embleton ND, Jacobs SE et al (2011) Enteral feeding practices in very preterm infants: an international survey. *Arch. Dis. Child. Fetal Neonatal Ed.* 10.1136/adc.2010.204123

Lack, 2015, LEAP study Results, available online from <u>http://www.leapstudy.com/leap-study-results#.Wk9ozrp2vcs</u> accessed 05/01/18

Leadsom, A., Field, F., Burstow, P. and Lucas, C., 2013. The 1001 critical days: The importance of the conception to age two period. *London: A Cross Party Manifesto*.

Loof-Johanson, M, (2015) Breastfeeding Associated with Reduced Mortality in Women with Breast Cancer, *Breastfeeding Medicine*, doi:10.1089/bfm.2015.0094

Luan NN, Wu QJ, Gong TT, Vogtmann E et al. (2013) Breastfeeding and ovarian cancer risk: a meta-analysis of epidemiologic studies. *American Journal of Clinical Nutrition* 2013; 98 (4): 1020–31.

Lucas, P.J., Jessiman, T., Cameron, A., Wiggins, M., Hollingworth, K. and Austerberry, C., (2013). Healthy Start vouchers study: The views and experiences of parents, professionals and small retailers in England. *Accessed on*, *17*/11/17

Mahurin-Smith J, Dethorne LS, Logan JA, Channell RW, Petrill SA (2014), The Impact of prematurity on language skills at school age, *Journal of Speech, Language and Hearing Research*, 57 (3), 901-916.

Maitre, N, et al (2017), The Dual Nature of Early-Life Experience on Somatosensory Processing in the Human Infant Brain. Current Biology, DOI: <u>http://dx.doi.org/10.1016/j.cub.2017.02.036</u>

McFadden A, Gavine A, Renfrew M, Wade A, Buchanan P, Taylor JL, Veitch E, Rennie A, Crowther SA, Neiman S, MacGillivray S (2017) Support for Breastfeeding Mothers, Feb 2017, *A Cochrane Review*, [ONLINE] <u>http://www.cochrane.org/CD001141/PREG_support</u> <u>breastfeeding-mothers</u>

The Mental Health of Children and Young People: A Framework for Promotion, Prevention and Care, Scottish Executive, 2005.

Morley R, Lucas A. (2000) Randomised diet in the neonatal period and growth performance until 7.5–8 y of age in preterm children. *Am J Clin Nutr*,71:822–8

Mueller, NT. et al. (2015) The infant microbiome development: mom matters, *Trends in Molecular Medicine*, Volume 21, Issue 2, 109 - 117 doi: 10.1016/j.molmed.2014.12.002

National Maternity Review, (2016) Better Births Improving Outcomes of maternity services in England a five year forward view for maternity care available [ONLINE] Available from https://www.england.nhs.uk/wp-content/uploads/2016/02/national-maternity-review-report.pdf accessed 16/12/17

NHS Digital, 2017, NCMP Child Measurement England, 2016/17 School year

NHS England, 2016. National Maternity Review. Better Births; Improving Outcomes of Maternity Services in England. *NHS England, London*.

NHS Group, 2014. NHS outcomes framework 2015/16. Department of Health, Edinburgh.

NICE (2017) *Vitamin D supplement use in specific population groups,* PH56 [ONLINE] available from <u>https://www.nice.org.uk/guidance/PH56</u>

NICE (2014) *Obesity: identification, assessment and management,CG189* [ONLINE] Available from https://www.nice.org.uk/guidance/cg189/chapter/1-recommendations

Peachey, Smith and Sharma (2013), *Families in need of food parcels – the food poverty crisis unwrapped,* Essex: Barnardo's, [ONLINE] http://www.barnardos.org.uk/families_in_need_of_food_parcels_-_2013.pdf

Public Health England, (2016a), *Commissioning Infant Services Infogram* [ONLINE] <u>https://www.gov.uk/government/publications/infant-feeding-commissioning-services</u>

Public Health England (2014) *From evidence into action: opportunities to protect and improve the nation's health* [ONLINE] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/366852/PHE_ Priorities.pdf

Renfrew MJ, Pokhrel S, Quigley M, McCormick F, Fox-Rushby J, Dodds R, Duffy S, Trueman P, Williams T (2012) *Preventing disease and saving resources: the potential contribution of increasing breastfeeding rates in the UK*, UNICEF UK BFI <u>http://www.unicef.org.uk/Documents/Baby_Friendly/Research/Preventing_disease_saving_r</u> esources.pdf

Renfrew MJ, McCormick FM, Wade A, Quinn B and Dowsell T. (2012b) Support for Healthy breastfeeding mothers with healthy term babies. Cochrane Database of Systematic Reviews (5) CD001141. DOI: 10.1002/14651858.CD001141.pub4 Scientific Advisory Committee on Nutrition (2008) *The Nutritional Wellbeing of the British*

Rice SJ, Craig D, McCormick F et al (2010) Economic evaluation of enhanced staff contact for the promotion of breastfeeding for low birth weight infants. *Int J Technol Assess Health Care* (26(2): 133.

SACN and RCPCH, 2012, Consideration of issues around the use of BMI centile thresholds for defining underweight, overweight and obesity in children aged 2-18 years in the UK, [ONLINE]

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/339411/SACN_ _RCPCH_defining_child_underweight_overweight_and_obesity_in_the_UK_2012.pdf accessed 16/11/17

SACN 2017 *Weaning advice for Healthcare Professionals*. Available from: <u>https://child-nutrition.co.uk/advice/weaning-advice-for-hcps/</u>

Shribman, S. and Billingham, K., 2009. Healthy Child Programme: pregnancy and the first five years. *London: Department of Health*.

Stiefel, G., Anagnostou, K., Boyle, R.J., Brathwaite, N., Ewan, P., Fox, A.T., Huber, P., Luyt, D., Till, S.J., Venter, C. and Clark, A.T., 2017. *BSACI guideline for the diagnosis and management of peanut and tree nut allergy. Clinical & Experimental Allergy*, 47(6), pp.719-739.

Sustain (2015) Beyond the Food Bank, *London food poverty profile* [ONLINE] <u>https://www.sustainweb.org/secure/BeyondTheFoodBank.pdf</u>

Population. London: TSO.

Sustainability and Transformation plan Wider Devon 4th November (2016) [ONLINE] <u>https://healthwatchdevon.co.uk/wp-content/uploads/2016/11/2016-11-03-wider-Devon-STP-Published-Final-3.pdf</u>

The Caroline Walker Trust (2011), *Eating well the first year of life,* [ONLINE] <u>http://www.cwt.org.uk/wp-content/uploads/2014/07/CHEW-1stYearLifePracticalGuide.pdf</u> <u>accessed 16/11/17</u>

The Solihull Approach, (2015) Quick guide to the Solihull Approach [ONLINE] <u>https://solihullapproachparenting.com/quick-guide-to-the-solihull-approach/</u> Accessed 19/01/18

Tomblin JB, Smith E and Zhang X (1997) Epidemiology of specific Language Impairment: Prenatal and perinatal risk factors. *Journal of Communication Disorders*, 30 (4) 325-344

Unicef (2017a) Removing the Barriers to Breastfeeding: A call to action available [ONLINE] https://www.unicef.org.uk/babyfriendly/wp-content/uploads/sites/2/2017/07/Barriers-to-Breastfeeding-Briefing-The-Baby-Friendly-Initiative.pdf accessed 08/11/17

Unicef (2017b) Change the Conversation Campaign [ONLINE] https://www.unicef.org.uk/babyfriendly/baby-friendly-resources/advocacy/join-our-changethe-conversation-campaign/ accessed 09/11/17

Unicef (2017c) What has breastfeeding got to do with poverty [ONLINE] https://www.unicef.org.uk/babyfriendly/what-has-breastfeeding-got-to-do-with-poverty/ accessed 07/11/17

Unicef (2017d) Responsive Feeding:Supporting close and loving relationships [ONLINE]<u>https://www.unicef.org.uk/babyfriendly/wp-</u> content/uploads/sites/2/2017/12/Responsive-Feeding-Infosheet-Unicef-UK-Baby-Friendly-Initiative.pdf accessed 19/01/18

Unicef (2018) The Baby Friendly Initiative Protecting, promoting and supporting breastfeeding & close, loving parent-Infant relationships. [ONLINE] <u>https://www.unicef.org.uk/babyfriendly/</u> accessed 18/01/18

United Nations (2015) *The UN Sustainable Developmental Goals; 17 Goals to transform our world in "Transforming our World: the 2030 agenda for sustainable development:* A/RES/70/1

United Nations(1989) United Nations Convention on the Rights for Children (1989) [ONLINE] https://www.unicef.org.uk/what-we-do/un-convention-child-rights/ accessed 14/11/17

Victora CG, Bahl R, Barros AJD, Franca GVA, Horton S, Krasevec J, Murch S, Sankar MJ, Walker N, Rollins NC (2016) Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. *The Lancet Series: Breastfeeding 1.* Volume 387, No. 10017, p475–490, 30 January.

Wambach, K. and Riordan, J. eds., (2014). *Breastfeeding and human lactation*. Jones & Bartlett Publishers.

Weichselbaum, E. and Buttriss, J. (2011), Nutrition, health and school children. *Nutrition Bulletin*, 36: 295–355. doi:10.1111/j.1467-3010.2011.01910.

Westland, S, & Crawley, H, (2012) *Healthy and sustainable diets in the early years,* First Steps Nutrition available from http://www.firststepsnutrition.org/pdfs/HaSDEY_proof2.pdf

World Health Organisation (2017) *Infant and Young Child Feeding*, [ONLINE] <u>http://www.who.int/mediacentre/factsheets/fs342/en/</u> accessed 14/11/17

World Health Organization and UNICEF, (2003). *Global strategy for infant and young child feeding*. World Health Organization.

World Health Organisation (1981) International Code of Marketing of Breast-milk Substitutes [ONLINE] <u>http://www.who.int/nutrition/publications/code_english.pdf</u> accessed 14/11/17

Wright, C, (2017) *Diet and Nutrition in the First Year: What makes the real difference for current and future health.* Professor Charlotte Wright, Professor of Community Child Health, University of Glasgow, Talking at The Baby Friendly Initiative Conference, 22nd November 2017, Telford.

Gail Barker ADVANCED PUBLIC HEALTH PRACTITIONER

Draft	Date
First draft November	18/11/17 sent to all stakeholders for input.
Second Draft	11/12/17 sent to all stakeholders for input.
Third Draft	20/12/17 sent to all stakeholders for input.
Fourth Draft	09/01/18 sent to all Stakeholders
Fifth draft	19/01/18 sent to all stakeholders for final
	input.
Final Version Adopted	27/04/18