The UK Healthy Start scheme



The UK Healthy Start scheme. What happened? What next?

By Dr Helen Crawley and Rosie Dodds.

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FIRST STEPS NUTRITION TRUST



First Steps Nutrition Trust

66 Hammersmith Road London W14 8UD

www.firststepsnutrition.org

E: admin@firststepsnutrition.org Registered charity number: 1146408

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Glossary

In the Healthy Start scheme ...

Eligibility refers to the number of people who are eligible to apply for Healthy Start.

Entitled refers to beneficiaries who have applied to the Healthy Start scheme and have had their claim validated.

Acronyms

DHSC Department of Health and Social Care

DNSIYC Diet and Nutrition Survey for Infants and Young Children

DWP Department for Work and Pensions

HSIU Healthy Start Issuing Unit

IFS Infant Feeding Survey

LIDNS Low Income Diet and Nutrition Survey

NGO non-governmental organisation

NTD neural tube defect

SACN Scientific Advisory Committee on Nutrition

SIDS sudden infant death syndrome

WIC Special Supplemental Nutrition Program for Women, Infants, and Children

Executive summary and recommendations

his report summarises the development of the Healthy Start scheme in the UK, and looks at why a welfare food scheme is important and what has happened since the Healthy Start scheme was introduced in 2006.

Healthy Start replaced the previous welfare food scheme in 2006, to offer vouchers for cows' milk, fruit and vegetables or infant formula, and coupons for vitamin supplements, to pregnant under-18s and to low-income pregnant women and families with children under 4 years of age. The scheme aimed to act as a nutritional safety net and to support better eating habits in low-income families and in young pregnant women and to equalise the offer for women breastfeeding their infants. The nutritional status of pregnant women, infants and young children has implications for the health of both current and future generations and there is good evidence for the benefits of encouraging better eating habits amongst lower-income women and families. The Healthy Start scheme is valued by recipients, has been shown to support and promote better eating habits and helps families with the cost of infant formula. It is timely to review what has happened to the Healthy Start scheme in the UK as we are currently in a new era of child poverty and family food insecurity, which has the potential to damage the health and wellbeing of women, infants and children in both the short and long term. Below we summarise the key points from the evidence reviewed in this report and make recommendations for measures that can be taken to make the Healthy Start scheme fit for purpose.

Eligibility for and uptake of Healthy Start

The eligibility for and uptake of Healthy Start, and Government spending on the scheme, rapidly declined in the five years from 2013 to 2018. Currently (in 2018) fewer than 500,000 individuals in the UK are eligible for Healthy Start benefits – a 30% reduction since 2011. Uptake by

those eligible for the scheme has reduced from around 80% in 2011 to 66% in 2018. We estimate that, in 2017, families missed out on about £41.6 million by not taking up the Healthy Start benefit (or £33.3 million if an uptake rate of 80% had been achieved). The original annual budget for the scheme was never fully spent and it is estimated that currently the annual cost of the Healthy Start scheme is around 50% of the original budget suggested.

It is likely that the number of pregnant women eligible for Healthy Start is underestimated, since the Department of Work and Pensions will only know of a pregnancy if a validated application form is submitted. It has been suggested that this will change under Universal Credit where pregnancies will be registered earlier. Young pregnant women are particularly vulnerable to poor birth outcomes and yet evidence suggests that 8 out of 10 young pregnant women (under 18 years) are missing out on Healthy Start benefits.

No review of the impact of Universal Credit on eligibility to Healthy Start appears to have been carried out, nor appears to be planned. It is currently not known how the upper threshold for Healthy Start eligibility (£408 earned household income a month in 2018) will impact on the numbers of families in receipt of Healthy Start.

Changes in benefit thresholds, the move to Universal Credit, benefit sanctions and reduced support for families who have a third child, alongside rising household costs, have been linked to an increase in food insecurity in the UK. Whilst accurate data for the number of families, and the number of children who are food insecure are not available, evidence suggests this is a significant problem with long-term damaging consequences for health and wellbeing. The reduction in the number of families eligible for Healthy Start appears incongruous against this backdrop of increasing hardship among low-income families.

Value of the Healthy Start food voucher and how the vouchers are spent

When the Healthy Start scheme was first introduced in 2006, the value of the food voucher was £2.80, and in 2009 it was raised to £3.10. There has been no further increase in the value of the Healthy Start voucher since 2009, despite food price rises.

There are no up-to-date data on how Healthy Start vouchers are used. The impact that Healthy Start may have on food intake and nutritional status has never been reviewed.

The value of the voucher is no longer sufficient to provide the nutritional support to families that was originally intended. Two vouchers per week for an infant does not currently cover the cost of infant formula, but one of the aims of the scheme is to prevent low-income women from using unsuitable milk alternatives in the first year of life. Healthy Start does not therefore act as a safety net for infants who are not being breastfed.

An increase in voucher value is also needed to support pregnant women and children aged 1-4 years to consume the recommended 5 portions of a variety of fruit and vegetables each day as well as additional cows' milk.

Some women use the vouchers to stockpile infant formula during pregnancy rather than to improve their own nutrition by buying fruit, vegetables or cows' milk. Vouchers for pregnant women or for children aged 1-4 years are currently not ring-fenced to ensure that only fruit, vegetables or plain cows' milk is purchased.

Increasing the number of women who breastfeed, and increasing the duration of breastfeeding, is a UK public health priority. The Healthy Start scheme provides no incentive to breastfeed. Evidence from the USA WIC scheme suggests that increasing the value of the welfare food package for breastfeeding mothers and offering more breastfeeding support can significantly increase both the prevalence and duration of breastfeeding.

No comprehensive review of the items that can be bought with Healthy Start food vouchers has been undertaken. Changing population demographics mean that a review is needed of milk and milk alternatives that can be purchased with the vouchers. Other foods – such as canned fruit, vegetables or pulses, dried pulses or eggs – could provide additional dietary support particularly for families who do not have access to or the ability to store fresh or frozen fruit and vegetables.

The application process presents a number of difficulties for those applying for the Healthy Start scheme. The application form can appear complicated and there is often little support for applicants to fill in the form correctly. Almost a third of applications are rejected because the form is not correctly filled in. The application form is provided only in English.

Applications for Healthy Start

The application form has to be signed by a health professional but the health professional does not need to check the applicant is eligible for the scheme; they are simply confirming a pregnancy or birth, or that the family has a child under 4 years of age. Health professionals may not want to initiate a conversation about Healthy Start if they believe they need to know whether the person is eligible. Also, they have to state on the form that they have given the potential recipient health-related advice, but they may have limited time and resources to talk to families about Healthy Start at key contact times.



Currently it can take up to four weeks for HM Revenue and Customs (HMRC) and the Department for Work and Pensions to confirm to the Healthy Start Issuing Unit (HSIU) if an applicant is entitled to Healthy Start, so that the HSIU can start issuing vouchers and coupons. As the woman has to be 10 weeks pregnant before she can apply for Healthy Start, this means that she may be up to 14 weeks pregnant before receiving the vitamin coupons and food vouchers. To prevent neural tube defects (NTDs), folic acid supplements need to be taken before pregnancy and during the first 12 weeks of pregnancy, so the window of opportunity for folic acid supplementation may therefore have passed by the time women can access the Healthy Start vitamins. It has been suggested that it would be cost-effective to extend the offering of Healthy Start supplements containing folic acid universally to all women who are planning a pregnancy and to women less than 10 weeks pregnant, to prevent neural tube defect affected pregnancies and births. Whilst there are difficulties accessing women pre-pregnancy, providing free Healthy Start vitamin supplements to vulnerable women earlier in their pregnancy should be considered.

Healthy Start provides an opportunity to remind women post-pregnancy of the importance of folic acid supplementation before entering another pregnancy. However, universal fortification of flour with folic acid is the most useful safety net for the population, as this would ensure that many more women would have increased intakes regardless of whether they are eligible to benefits.

Currently, Healthy Start beneficiaries need to email or phone the Healthy Start Issuing Unit after the birth of their baby to report the birth, in order to ensure continued access to Healthy Start. This is a barrier for families and needs to be reconsidered on both practical and health grounds. Some women do not know that they need to report the birth and many families may simply forget to do this as they are wrapped up in the care of a new baby. The cost of the phone call (up to 40p per minute) may also act as a barrier. Currently access to vouchers and coupons stops after the baby's expected delivery date if confirmation of a birth has not been received.

For the very small number of families where pregnancy sadly does not lead to a live birth, continuation of provision of Healthy Start vitamin vouchers would be a prudent public health measure, since women may become pregnant again.

Receiving vouchers by post is difficult for women or families who do not have permanent accommodation and may move frequently.

Digitising Healthy Start and providing recipients with a card on which the benefit is loaded and which can be used more flexibly when shopping, has been suggested as a way to reduce stigma and to help families manage their shopping. Consideration has to be given in any digitisation scheme to those vulnerable families who may have limited access to technology, or who live in areas where internet speeds are lower, or where retailers may not have the technology to receive a card payment.

There appears to be a lack of consistent support and promotion of Healthy
Start nationally, among health professionals, and at a local public health level.
Evidence from areas that have improved uptake suggests that training of health
professionals at a local level to support families in their applications is crucial to increase uptake.
Coordinated working amongst health, social care and welfare rights workers across all disciplines is
needed to ensure that eligible families are encouraged and supported to apply for Healthy Start.

The Healthy Start scheme has failed to provide beneficiaries with the information and support that were originally planned in order for the scheme to meet its original objectives. Beneficiaries are currently not consistently supported in how they can best



use their food vouchers and are not given information on breastfeeding support, the safe preparation of infant formula, information about all first infant formula having to meet the same compositional regulations, or the importance of taking vitamin supplements pre-pregnancy.

Increasing the
number and
types of
retailers and
linking with
local food
production

Healthy Start provides an opportunity for retailers who provide locally grown and sourced food. In future food and farming policy, consideration should be given to linking public funds spent via Healthy Start with schemes to support UK growers and farmers.

Smaller retailers in markets, those offering food in box schemes or through community supported agriculture schemes and those providing food via social pantries and social supermarkets are often not linked in to the Healthy Start food voucher scheme.

Accurate information on the uptake of the Healthy Start vitamins is lacking.

Healthy Start vitamins

In a number of areas of the UK, free vitamins are provided either universally to all pregnant and breastfeeding women and children

up to the age of 4 years, or part-universally to some population groups only. Scotland provides all pregnant women with free Healthy Start vitamins. The Healthy Start website does not currently provide information to families on which areas of the country offer universal or part-universal free vitamin schemes.

A cost-effectiveness review reported that the most important group to receive Healthy Start vitamins are women planning a pregnancy and women in the first 10 weeks of pregnancy. Ensuring all those who are at potential risk of vitamin D insufficiency receive vitamin D supplements is the reason why many areas provide free vitamins universally or part-universally. Those at particular risk include: women and children with darker skin; women who cover up when outside the house or those who limit exposure of their skin to the sun; women and children with a disability or disadvantage that may mean families spend little or no time outside; or where families live in a more northerly latitude and have lower sun exposure.

Healthy Start vitamins have been reported as difficult to access in some areas.

There is currently some confusion about the use of Healthy Start vitamins for infants, and clarity over recommendations and the reformulation of Healthy Start vitamins planned for 2018/19 is needed.

Currently there is no annual report on Healthy Start from the Department of Health and Social Care and Department for Work and Pensions to Ministers to explain whether the scheme is meeting its agreed targets and what measures will be taken to support the scheme over the coming year.

Reporting and consultations on Healthy Start

Changes suggested in the Scottish Welfare Foods consultation are to increase eligibility to the scheme and link it to other maternal and young child benefits under a new name of 'Best Start', to increase the value of the voucher, to review the foods that can be bought with Healthy Start vouchers, and to integrate the scheme more effectively with the maternal and infant nutrition strategy in Scotland. There is no integrated maternal and infant nutrition strategy in England, Wales or Northern Ireland.

The Department of Health and Social Care in England has proposed a consultation on Healthy Start in 2018.

Recommendations

Eligibility for and uptake of the Healthy Start scheme

- The Healthy Start Issuing Unit should report annually to the Ministers of State for Health and Health and Social Care in the UK on eligibility for and uptake to the scheme and this information should be made publicly available.
- Governments and policy-makers should set a target of at least 80% uptake for Healthy Start among those eligible to receive it.
- The National Institute for Health and Care Excellence (NICE) should be commissioned to conduct a cost-benefit analysis of increasing the reach of Healthy Start in England. Wales and Northern Ireland should commission similar work. The review should consider the impact of:
 - offering food vouchers to all eligible families on Universal Credit
 - increasing the income threshold below which food and vitamin vouchers can be claimed
 - including additional population groups for example: all women who become pregnant under the age of 20 years; and children up to the age of 5 years
 - allowing women to claim vouchers from the time of confirmation of pregnancy rather than from when they are 10 weeks pregnant.
- Food insecurity among both adults and children should be measured in the UK annually, using agreed measurement criteria. This information should be used to inform eligibility to the Healthy Start scheme and the value of the Healthy Start food vouchers.
- An urgent review of the impact of Universal Credit on eligibility for Healthy Start should be undertaken by the Department for Work and Pensions and the information made publicly available.

Promotion of Healthy Start

- The Departments of Health or Health and Social Care should commission a communication strategy to increase awareness of the Healthy Start scheme among the general population, eligible families, health professionals and retailers.
- The Departments of Health or Health and Social Care should fund the creation of a toolkit to support local authorities or health boards in increasing the uptake of the Healthy Start scheme in their areas.
- The GP IT System, or other systems such as EMIS or Vision, should be used to inform GPs about the Healthy Start scheme. GPs should also be encouraged to access information on infant feeding useful to GPs, such as that linked by the GP Infant Feeding Network (www.gpifn.org.uk).
- The Healthy Start website should be maintained and updated to ensure it provides relevant, upto-date information and support for local areas.
- Information about Healthy Start should be made available in a variety of languages.
- Information about Healthy Start should remain available in printed form as well as in digital formats.

Healthy Start budget

• The Departments of Health or Health and Social Care should publicly commit to an annual budget for Healthy Start for each region of the UK. If the budget is underspent, surplus funds should be allocated to other schemes to promote better health and wellbeing for women and children – for example, by offering further support to the National Breastfeeding Helpline.

The value of the Healthy Start food voucher and how it can be spent

- The value of the Healthy Start voucher should be increased to £4.50 per voucher with immediate effect.
- The cost of a healthy diet for pregnant and breastfeeding women and the cost of infant formula should be monitored annually, and the value of the Healthy Start food voucher considered in light of this information.
- An enhanced Healthy Start food voucher package should be offered for women who
 breastfeed in the first year of their baby's life. A scoping exercise should be carried out on how
 women who breastfeed in the first year (either exclusively or partially) and have had support to
 manage their breastfeeding from a qualified breastfeeding counsellor, can receive three ringfenced food vouchers a week to support their own increased nutritional needs and provide
 food for their infant in the second six months of life.
- The foods that families can buy with Healthy Start vouchers should be reviewed. Currently the Healthy Start vouchers cannot be used to buy canned fruit, vegetables or pulses, dried pulses or eggs. These foods could make an important contribution to current dietary goals and for some families they may be easier to access and store. A review of which milks and milk alternatives (and which infant formula) can be purchased with the vouchers should also be undertaken.

Applications for Healthy Start

- The Department for Work and Pensions and HM Revenue and Customs should undertake a
 review to examine whether Healthy Start benefits can be successfully paid directly to families
 without the need for a separate application. It is likely that pregnant women will still have
 to apply directly, as pregnancy may not be flagged in families receiving other benefits or for
 women under 18 years of age.
- The Healthy Start application form should be simplified to support applications from potential beneficiaries who find it difficult to complete the form.
- There is a need to review the requirement for a health professional to sign the Healthy Start application form before it can be submitted, as the current need for a signature can be a barrier to potential beneficiaries submitting their applications.
- The application form booklet should be made available in languages other than English, to reflect the demographics of families with limited English language eligible for Healthy Start.

- Midwives, health visitors and GPs should offer all pregnant women a signed Healthy Start application form when first seen when pregnant, and should signpost women and young women (under 18 years of age) to information on eating well in pregnancy¹.
- Midwives, health visitors and GPs should know where to access information on eating well for infants and young children aged 1-4 years so they can signpost potential Healthy Start beneficiaries to additional support when they sign the Healthy Start form to confirm a birth or eligible child in a family².

Delivery of the scheme

- HM Revenue and Customs and the Department for Work and Pensions should make a more efficient transfer of information about Healthy Start claimants to the Healthy Start Issuing Unit to reduce the wait time before vouchers and coupons are sent out.
- Systems should be set up by the Department for Work and Pensions and the Healthy Start
 Issuing Unit to monitor and regularly report on processing times for the delivery of Healthy Start
 food vouchers and vitamin coupons.
- The need for women to report the birth of their baby in order to continue receiving their Healthy Start food vouchers and vitamin coupons should be reviewed and where possible solved through better data exchange between the Department for Work and Pensions and the Healthy Start Issuing Unit.
- If the requirement to report the birth of a baby remains in place, it should be made possible for applicants to confirm the birth of their baby or to communicate with the Healthy Start Issuing Unit via a freephone number.
- Where women or families are not in permanent accommodation and may move frequently, consideration should be given to whether their vouchers can be sent to a central point (such as a GP surgery, library or children's centre) for collection.
- The advantages and disadvantages of introducing a Healthy Start digital card system should be further investigated. This should include looking at how the Healthy Start cards could be customised for pregnant women, women with children aged 1-4 years, women who choose to breastfeed, and women with infants in the first year of life who wish to buy infant formula, so that the goods they can buy with the vouchers can be differentiated.

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¹ Resources on eating well in pregnancy for women, and for women under 18 years of age, can be found at www.firststepsnutrition.org

² Resources on eating well in the first year of life, and to support children aged 1-4 years, can be found at www.firststepsnutrition.org

Information and support for Healthy Start beneficiaries

- When the Healthy Start vouchers are sent out to the recipient, the package should include information on:
 - how to access breastfeeding support, including which health professionals to contact, information on the National Breastfeeding Helpline, and contacts for all the UK-wide motherto-mother support groups, as well as links to online support
 - the advantages to the family of spending their Healthy Start vouchers on food rather than infant formula
 - a clear explanation that there are no benefits to more expensive brands of infant formula as all must meet regulatory standards on nutritional composition
 - clear, simple pictorial instructions on making up powdered infant formula safely, that can be easily understood by all households
 - a reminder of the importance of taking Healthy Start vitamins or folic acid supplements before becoming pregnant and in the first 12 weeks of pregnancy.
 - where to access independent practical information on eating well in pregnancy, for infants, and for children aged 1-4 years.
- Training of health professionals was originally planned as part of the Healthy Start scheme's
 introduction so that the workforce has a clear understanding of the Healthy Start scheme and
 the importance of good nutrition for beneficiaries. This training should be reinstated with
 central funding from Departments of Health or Health and Social Care.

Healthy Start vitamins

- The Healthy Start website and promotion materials should highlight which areas of the UK offer free universal or part-universal vitamin supplementation.
- The Healthy Start website and leaflets should provide information in line with recent changes to vitamin recommendations for infants younger than 6 months.
- Consideration should be given to whether women who had been eligible for Healthy Start but
 who did not have a live birth can continue to be supported with Healthy Start vitamins if they
 are planning to have another baby.
- The Departments of Health and Health and Social Care should ask the Scientific Advisory Committee on Nutrition to advise on whether women who take 5mg of folic acid as an antenatal supplement can also take Healthy Start vitamins.
- The Departments of Health and Health and Social Care should commission the Scientific Advisory Committee on Nutrition or the National Institute for Health and Care Excellence (NICE) to provide advice on reformulating the Healthy Start vitamins as primarily vitamin D supplements.

Local coordination of Healthy Start

- In each local authority area, a Healthy Start Guardian should be appointed who is a senior member of staff. They would be responsible for coordinating activities around Healthy Start and working across organisational boundaries in health and social services and local public health.
 The Guardian should provide an annual report to the Director of Public Health on eligibility for and uptake of Healthy Start in the local area.
- Cities and local and regional health authorities should set a target of at least 80% uptake for Healthy Start among those eligible to receive it, and report on this annually.
- Local public health departments should work with those who support young pregnant women in their area (for example, Family Nurse Partnerships) to encourage pregnant women under 18 years of age to apply for Healthy Start to meet a target uptake of at least 80%.
- Directors of Public Health should consider using part of the public health budget to provide universal free Healthy Start vitamins to all pregnant and breastfeeding women and to all children aged under 4 years in the UK.
- The Healthy Start Guardian, Healthy Start Coordinator, Director of Public Health, Health Board or the Clinical Commissioning Group should ensure Healthy Start vitamins are widely available by making arrangements with a range of settings in which to promote and distribute them. This could include local pharmacies, children's centres, midwifery and health visiting services, and GP reception areas.

Promoting Healthy Start locally

- Healthy Start application forms should be readily available in maternity settings, GP surgeries, and children's centres, and should be included in new birth packs and other relevant support information that parents may receive when pregnant, or for their under 4 year olds.
- Local areas should promote Healthy Start in settings that pregnant women and young families
 may visit. For example, posters or video loops could be used in antenatal clinics and GP waiting
 rooms, at antenatal classes, breastfeeding support services and drop-ins, children's centres, and
 contraceptive clinics.
- Local areas should work with faith groups, community groups and cultural centres to find out how families who do not have English as a first language but who may be eligible for Healthy Start can be supported to apply for and use Healthy Start food vouchers and vitamin coupons.
- Local areas should ensure all those who work with pregnant women and young families in any
 health, social care or community setting know to talk to women and families about Healthy
 Start and have access to information about and application forms for the scheme. This includes
 all health and social care staff, children's centre staff, welfare rights workers, those working in
 food banks and other local food projects, and volunteers who work with pregnant women and
 young families in any community setting.
- Local authorities should decide who is best placed to offer support to families to complete their application form, particularly if English is not their first language. This should be part of an integrated local plan to achieve at least 80% uptake of the scheme.

- Healthy Start should be clearly signposted in any city-wide or local food poverty action plans and be included in measurable outcomes that must be reported on in responses to public health needs assessments.
- Those coordinating Healthy Start should link with other public health initiatives such as the Sustainable Food Cities' Veg Cities project or the Peas Please project coordinated by The Food Foundation.

Retailers

- Local authorities should be proactive at engaging with local retailers and food markets, encouraging them to promote Healthy Start vouchers at the point of sale.
- Local food projects, farmers' markets, social pantries or supermarkets and community gardens
 that sell fruit and vegetables should be supported by local authorities to become registered to
 accept Healthy Start vouchers.
- All retailers should consider offering special promotions to the value of a Healthy Start food voucher.

General policy and strategies

- The Departments of Health and Health and Social Care should commission a regular review of the effectiveness of the Healthy Start scheme in achieving its public health goals.
- The National Asylum Support Service should review the additional payments to pregnant women, infants and young children to ensure that these are uprated in line with Healthy Start benefits, since the extra payments also aim to support the health and wellbeing of vulnerable women and children.
- All UK countries should have a Maternal and Infant Nutrition Strategy Board, and an up-to-date maternal and infant nutrition strategy into which the promotion and support of Healthy Start can be integrated.
- Government should act on the recommendations made on the mandatory addition of folic acid to flour to act as a public health safety net for women who may not access folic acid supplementation before pregnancy and during the first 12 weeks of pregnancy.
- Changes to agricultural subsidies and horticulture planning should ensure that fruits and vegetables offered through schemes supported by public money, such as the Healthy Start scheme, are integrated into this planning.

1 Introduction

his report summarises the development of the current Healthy Start scheme, considers why this nutritional safety net is needed, and discusses the changes required to make it a scheme fit for purpose.

Despite Healthy Start having been in place across the UK since 2006, there remains a lack of knowledge and information about the scheme, confusion about it providing both vitamins and food vouchers, and inconsistency in how the scheme is managed in different areas. The scheme is spending considerably less annually, and reaching fewer households, than was intended when the scheme was planned and in its early days, and many pregnant women and families on low incomes are not receiving the benefit they are eligible for. Scotland is developing Healthy Start as a new, more integrated scheme and, at the time of writing this report (2018), is consulting on some innovative new measures to make the scheme fit for purpose. England plans its own consultation later in 2018.

1.1 The aim of this report

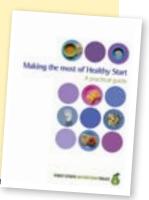
The aim of this report is to summarise what we know about the development and planned purpose of the Healthy Start scheme, and what has happened in practice. It also considers why a food welfare scheme is needed in the UK and the changes needed to make the scheme fit for purpose in a new era of austerity and food insecurity.

The report does not cover other welfare food schemes such as the Nursery Milk Scheme.

1,2 Who the report is for

The report is aimed at MPs, national and local government policy-makers, public health professionals, Healthy Start coordinators, health and social care workers (particularly health visitors and midwives), children's centre staff, those working in welfare rights organisations and charities, campaigners working to end food poverty, researchers and journalists.

First Steps Nutrition Trust has provided information on Healthy Start since 2013, with a regularly updated, open-access report on the Healthy Start scheme and how the Healthy Start food vouchers can support eating well for pregnant women and young families (First Steps Nutrition Trust, 2017). First Steps Nutrition Trust also ran the Healthy Start Alliance between 2013 and 2017, to provide information, to offer support to local areas, and to lobby for changes to the scheme.





What is the Healthy Start scheme?

he Healthy Start Scheme is a UK-wide statutory public health initiative to improve maternal and young child health. It provides a nutritional safety net for pregnant women, new mothers and young children in very low-income families, and for young pregnant women (under 18 years of age). The scheme is specifically a nutrition-supplement programme rather than an income support programme.

2.1 Welfare food in the UK

The Welfare Food Scheme was originally introduced as a universal measure in 1940 during the Second World War, to ensure that pregnant women and young children received milk during times of shortage and rationing. A quote from the Ministry of Health provides practical justification of why subsidising milk as a welfare food was important:

"... to ensure that the rise in the price of milk made necessary by the increased cost of production and distribution does not affect those classes of the community whose need for milk is greatest."

(Ministry of Health, 1955).

Cod liver oil, containing vitamins A and D, and concentrated orange juice, as a source of vitamin C, were also provided for all young children. Because the scheme was generally credited with improving the health of children during the war years, the relevant regulations were never repealed, although infant vitamin drops (and maternal tablets) replaced cod liver oil and orange juice in 1975, and commercial infant formula replaced National Dried Milk in 1977 for infants in eligible families (Ainsworth, 2014). During the 1950s, eligibility for the Welfare Food Scheme was narrowed and by 1979 was only available for families on a low income (Machell, 2014).

For decades, therefore, the Welfare Food Scheme provided low-income families with tokens that they could exchange for milk for their children under 5 years of age. The value of a voucher during the Welfare Food Scheme depended on the price of milk, as each voucher was exchangeable for 7 pints of cows' milk (or a 900g tin of infant formula).

In 1999, the UK Committee on Medical Aspects

of Food and Nutrition Policy (COMA) was commissioned to review the Welfare Food Scheme. They concluded that the scheme retained great potential for improving the health of pregnant women, mothers and young children from nutritionally vulnerable sectors of the population, and that the provision of free vitamin supplements offered a simple and potentially effective means of preventing adverse nutritional outcomes (Department of Health, 2002a).

However, there was also concern about the limited nutrient contribution of providing only milk (rather than milk and other foods), with the scheme providing too much cows' milk compared to recommendations made for 1-5 year olds. COMA therefore recommended that the scheme should continue but be adapted to also promote fruit and vegetable consumption (Department of Health, 2002a). The intention was to widen choice for families, for some of whom cows' milk may not be suitable, and to encourage an increase in the consumption of vegetables and fruit among lowincome families (Department of Health, 2002c).

2.2 Proposal for a new welfare food scheme: Healthy Start

A new welfare food scheme to be called Healthy Start was proposed in 2002. The development of the scheme was part of a wider effort by Governments across the UK to improve health in early life and reduce health inequalities. The policy linked to a range of developments affecting families and young children, including changes in nutrition policy such as the National School Fruit Scheme, the Five A Day programme and the promotion of breastfeeding through the Infant Feeding Initiative in England, and Breastfeeding Strategies in Scotland and Wales.

Hazel Blears, the Public Health Minister at the time, said:

"These proposals will help lay the foundations for the good health of future generations. Good nutrition in pregnancy and early childhood is a key element in preventing obesity, cancer, coronary heart disease and strokes later in life. People with low incomes suffer more ill-health. By improving the nutritional benefit of the scheme, and making healthy options easier options, we can help to reduce these unfair inequalities."

(Department of Health, 2002b).

Department of Health analysis in 2005 had identified effective areas for interventions to narrow the gap in infant mortality, including:

- improving nutrition in women in disadvantaged groups of childbearing age, for example by ensuring full uptake of Healthy Start food vouchers by pregnant women in disadvantaged areas
- increasing breastfeeding initiation and duration rates in disadvantaged groups, as breastfeeding rates are much lower in these groups (Department of Health, 2005).

From a policy perspective, the new scheme was also presented as part of the Department for Work and Pensions' Opportunity for All strategy to tackle poverty and social exclusion. The press release explained:

"... in line with the Government's commitment to tackling health inequalities the reformed scheme would provide better nutrition and greater choice in a healthy diet for over 800,000 people in low income families – making the most effective use of the £142m funding each year in England, Scotland and Wales."

(Department of Health, 2002b).

The key proposed changes from the previous Welfare Food Scheme suggested were:

 to broaden the nutritional value of the scheme by adding fruit and vegetables to the liquid milk and infant formula currently provided

- to offer wider access to these foods through a fixed-value voucher (The voucher would be of broadly equivalent value to the then current allocation, which was 7 pints of liquid milk.)
- to link the scheme more closely with the NHS through antenatal and postnatal clinics.

The scheme was also supposed to provide:

- a communications campaign aimed at families, to encourage their use of the scheme and to give them advice about diet and health, and
- a communications and training programme for health professionals, to support them in targeting women and families in the most vulnerable groups (Department of Health, 2005).

When the Healthy Start Scheme was proposed, it was designed with the idea that eligible pregnant women (including all under-18s), and mothers and young children in low-income families had greater access to, and encouragement from, health professionals and others to eat a healthy diet. Women on a low income are less likely to register with a midwife or doctor early in the pregnancy (Department of Health, 2002c). As the health professional's signature is needed to confirm that the woman is pregnant, the thinking was that the scheme would provide an incentive to book earlier (Department of Health, 2002c). However, there were some concerns, raised by the Maternity Alliance and Royal College of Nursing, that if health professionals became the 'gatekeepers' of the scheme, it might interfere with the important relationship between health professionals and parents (Machell, 2014).

Vitamin supplements continued to be provided to pregnant or breastfeeding women and children under 4 years of age in low-income families as part of the Healthy Start scheme. Before 2006, women's vitamin supplements contained vitamin A. The reformulation removed vitamin A, as there was concern about the potential effect of too much vitamin A on the developing foetus (Department of Health, 2002a). Healthy Start vitamins for women contained vitamin D, vitamin C and folic acid.

The biggest difference between the Welfare Food Scheme and the new Healthy Start scheme introduced in 2006 was the change from providing milk tokens for 7 pints of milk or 900g of infant formula, to providing weekly vouchers with a fixed face value that could be used to buy fruit and vegetables as well as cows' milk or infant formula. Also, the upper age limit for eligibility for the scheme was lowered to the child's 4th rather than 5th birthday, as the Government had stipulated that the new scheme should not cost any more than the previous Welfare Food Scheme (Machell, 2014).

2.3 Introduction of Healthy Start in 2006

In November 2005, the Healthy Start scheme was introduced as a pilot scheme in Cornwall and Devon, to test the concept and practical aspects. During the pilot, the systems and processes underpinning delivery were expected to be thoroughly monitored and evaluated and lessons learned prior to roll-out across the whole of the UK (Dyson et al, 2007).

However, the new scheme was rolled out nationwide from November 2006 without this evaluation taking place. Existing Welfare Food Scheme recipients were automatically transferred on to the new scheme.

The rollout was not without criticism. In 2006, the Citizens Advice Bureau (CAB) said about Healthy Start:

"In our view the system is not fit for the purpose of promptly delivering this vital support to a highly vulnerable client group. These flaws are compounded by administrative delays and confusion, and by poor communication channels relied upon by clients to resolve their problems."

"Claimants have suffered because too much attention has been paid to complex organisational and administrative arrangements, without enough thought being given to customer service delivery. The result is a service which is not customer focussed." (Citizens Advice Bureau, 2006.)

One positive change that was a consequence of the introduction of Healthy Start food vouchers was that infant formula was no longer available for sale or token exchange from healthcare premises such as health centres or children's centres. This helped to reduce the promotion of infant formula through public services, with visible branded packaging no longer being on view, and reducing the idea that health facilities supported infant formula use. In addition, the Healthy Start scheme addressed the previous inequity between breastfeeding and formula-feeding families in the Welfare Food Scheme, in which women who formula-fed received approximately double the monetary value (i.e. infant formula for their babies) compared with those who breastfed (who received only cows' milk for themselves) (Dodds, 1999).

Since the introduction of Healthy Start in 2006, there have been two changes to the food voucher scheme. Firstly, in 2009 the value of the voucher was uprated from £2.80 to £3.10, the value it has remained at since that date (see section 2.3.1). Secondly, from 2011 plain frozen fruit and vegetables were added to the items that could be bought under the scheme, in response to concerns that families in rural areas and with poor access to fresh vegetables and fruit had less choice (Fruit and Vegetables Task Force, 2010). The Healthy Start vitamin coupon scheme has remained in place, but changes to local provision and national recommendations have made this a more complex policy area.

In 2010, a Department of Health Equality Impact Assessment was made on Healthy Start (Department of Health, 2010) and the success criteria for Healthy Start at that time were suggested as:

- an uptake rate for the scheme of 80% of eligible people, or more
- 90% of all food vouchers issued used by beneficiaries
- women and families supported by Healthy Start understanding that milk, fruit and vegetables make an important contribution to a healthy diet

 all women and families aware that they can receive free vitamin supplements through the Healthy Start scheme.

2,3,1 The value of the Healthy Start food voucher

There were concerns that the original £2.80 value of the Healthy Start food vouchers issued from 2006 to replace the milk tokens was too low (Citizens Advice Bureau, 2006). Under the Welfare Food Scheme, one token would enable a claimant with a child less than one year of age to buy 900g of infant formula each week. Under Healthy Start, a claimant with a child aged under 1 year was entitled to receive two vouchers, worth £5.60 in total, but in 2006 the average cost of 900g of infant formula was £5.98, leaving a shortfall of 38p per week (Citizens Advice Bureau, 2006).

"For many parents on a low income this shortfall could mean genuine difficulty and/ or that babies do not receive adequate nutrition."

(Citizens Advice Bureau, 2006.)

In 2009, the value of each Healthy Start voucher was increased from £2.80 to £3.10 per week. However, the value has not changed in the nine years from 2009 to 2018, leading to a reduced purchasing power, particularly in terms of infant formula.

In the recent Maternal and Infant Nutrition Survey in Scotland, 28% of pregnant women said they were using their Healthy Start vouchers to buy infant formula in advance of the baby's birth (Scottish Government, 2018a). In weeks where pregnant women did this, they were not gaining nutritional value for themselves from the vouchers. In a small study of pregnant low-income women in north-west England eligible for Healthy Start, stockpiling infant formula was also reported (Ohly et al, 2018). Women in this study felt that their need for the vouchers to support their eating was less important than their infant's need for formula after the birth, and the intention to formula-feed competed with their aspirations to eat well during pregnancy.

2,3,2 Communications around Healthy Start

When the Healthy Start scheme was introduced, a wide range of materials was produced, and these were reviewed and rebranded in 2009/2010 (Department of Health, 2010). The aim of refreshing the communications was specifically to encourage applications to the scheme from first-time pregnant women and to promote the importance of the vitamin supplements. The new materials included an extended range of posters, an improved application booklet and user guide, and a suite of life-stage specific flyers and minimagazines containing public health messaging to be sent to beneficiaries with their vouchers. There was concern in 2010 that pregnant under 18 year olds were under-represented in the scheme and special communications materials were designed to encourage pregnant under-18s to apply.

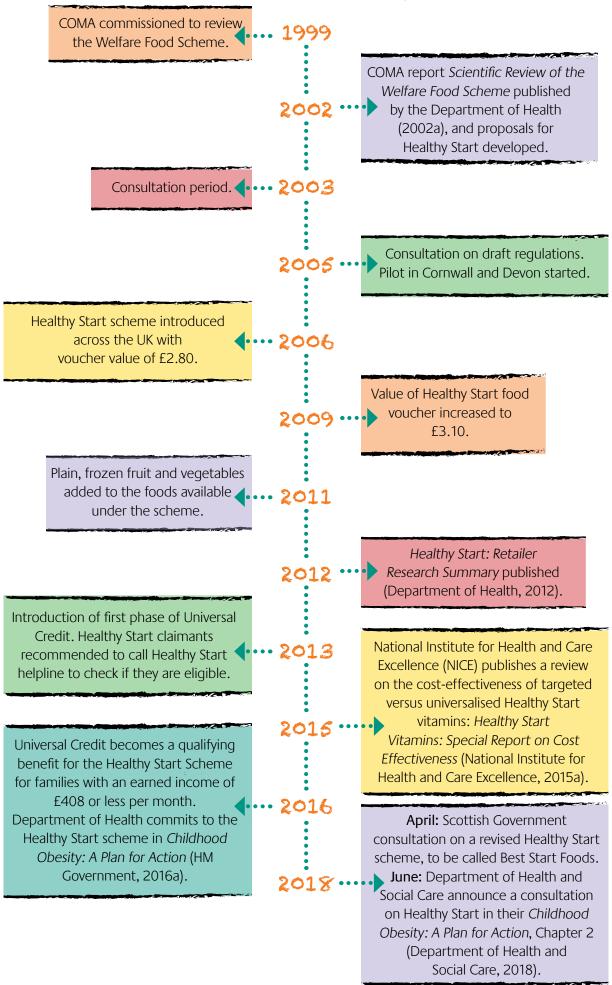
During the Department of Health Equality Assessment in 2010 (Department of Health, 2010), there were also discussions on whether materials should be made available in different languages, but the Government's Central Office of Information advised the Department of Health that the majority of beneficiaries were likely to have been born in the UK. Clusters of non-English speaking women were identified particularly in Bangladeshi, Pakistani and Somali communities and simple leaflets in Bengali, Urdu and Somali were produced to focus on the most important information on Healthy Start. The majority of printed health promotion materials have since been withdrawn by the Department of Health and currently the introductory booklet about Healthy Start (in English and Welsh) is the only resource available.

2,3,3 Timeline for Healthy Start

A timeline highlighting the main stages of the development of the Welfare Food Scheme to Healthy Start is shown in Figure 1.
A comprehensive discussion of the development

of Healthy Start, and of how the scheme has been included in policy discussions in the UK, can be found in Appendix 1.





2.4 Who qualifies for Healthy Start, and what does the scheme offer?

To qualify for Healthy Start, women need to be at least 10 weeks pregnant and/or have a child under 4 years old and receive certain means-tested benefits, Child Tax Credits or Universal Credit. All pregnant women aged under 18 years are eligible for the scheme, regardless of income. (See *Qualifying criteria for Healthy Start*, below.)

Qualifying criteria for Healthy Start

The following were the qualifying criteria for 2018:

- All pregnant women under 18 years old.
- Women who are at least 10 weeks pregnant, and families with children under 4 years old, qualify for Healthy Start if the family is getting:
 - Income Support, or
 - Income-based Jobseeker's Allowance, or
 - Income-related Employment and Support Allowance, or
 - Child Tax Credit (with a family income of £16,190 or less per year), or
 - Universal Credit (with a family takehome pay of £408 or less per month).

Pregnant under-18s may apply for Healthy Start during pregnancy and will continue to be supported by the scheme until their baby is born, even if they turn 18 during that period and are not receiving benefits or tax credits.

Healthy Start applications are accepted from either parent or carer in a household, provided one of them is claiming the qualifying benefits or tax credits and the children are part of their claim. A National Insurance number is required for a pregnant woman applying for Healthy Start in her own right.

Access to the Healthy Start scheme for asylum-seeking women and young families was suggested to the Government by lobby groups (Department of Health, 2010). Asylum-seeking women and young families are supported through the National Asylum Support Service which provides an additional weekly payment to pregnant asylum-seekers and those with children under 3 years. This payment has remained the same since Healthy Start was introduced in 2006, at £5 a week for a child under 1 year and £3 a week for a pregnant woman and child aged 1-2 years (Gov. UK, 2018). Asylum-seekers may also access vitamin supplements via NHS prescriptions.

What does the Healthy Start scheme offer?

The Healthy Start scheme offers:

- free Healthy Start vitamins (see section 2.6), and
- Healthy Start food vouchers (see section 2.7).

2.5 How do recipients access the Healthy Start scheme?

Before 2006, milk tokens were issued automatically to all those who were eligible for the Welfare Food Scheme once their pregnancy was confirmed. Women could call in to their local benefits agency office to provide proof of their eligibility, and could be issued with tokens straight away.

To access Healthy Start, eligible women or families need to complete an application form, which needs to be signed by a midwife, doctor or health visitor. This is sent to the Healthy Start Issuing Unit (HSIU) who check if the form is complete. The HSIU sends details of the claimants to the Department for Work and Pensions (DWP), who confirm if the family is entitled to Healthy Start by checking against a list of relevant benefit and tax credit claimants. HM Revenue and Customs (HMRC) currently sends the information about claimants to the DWP on a four-weekly basis. DWP

then inform the HSIU, which distributes the food vouchers and vitamin coupons. Pregnant women cannot apply for Healthy Start until they are 10 weeks pregnant, and are unlikely to receive the food vouchers and vitamin coupons for about four weeks, by which time they may be 14 weeks pregnant. This has implications for the usefulness of the folic acid in the vitamin tablets for women in the prevention of neural tube defect births (see section 4.6.1).

Many women will not know about the scheme before their first pregnancy and are unlikely to be eligible if they are working more than a few hours a week, unless they are under 18 years of age. The scheme was designed so that women would be informed about Healthy Start at their first antenatal appointment, which is often at about 12 weeks of pregnancy. Women at their booking-in appointment are over-loaded with information and advice and may need specific support to apply for the Healthy Start scheme. Evidence from the first Scottish Maternal and Infant Nutrition Survey reported that only 55% of women in their first pregnancy and 67% of women in subsequent pregnancies were aware of the Healthy Start scheme antenatally (Scottish Government, 2018a). Among those with infants aged 8-12 months, those who already had other children were more aware of the scheme (67%) than those who did not have other children (62%). Most women in this survey found out about the Healthy Start scheme from their midwife or health visitor (60% antenatally and 74% of post-natal respondents). In the same survey, 23% of respondents had heard of the scheme via the NHS Health Scotland publication Ready Steady Baby. Around 17% of women antenatally and 14% postnatally had heard about the scheme from a family member or friend.

2.5.1 Confirming the birth of the baby

Information from the Healthy Start Issuing Unit (personal communication, 2018) suggests that, in each batch of Healthy Start applications, around 30% are rejected. Very few of these are rejected because the applicant does not qualify (less than 3%). By far the majority of rejections are because

the form has not been correctly completed or has not been signed by a health professional.

Women who are Healthy Start recipients in pregnancy need to inform the Healthy Start Issuing Office when their baby is born, so that they continue to receive Healthy Start. They can confirm the birth of their baby by e-mail or a phone call but it appears that many women are not aware that they need to do this. The phone call can cost up to 40p per minute from a mobile phone. If they don't confirm that their baby has been born, Healthy Start benefits will stop from eight weeks after the expected delivery date.

2.5.2 Universal Credit

When Universal Credit was introduced, it was not initially clear whether Healthy Start vouchers would continue to be available to claimants. Families were told to contact the HSIU by phone and were sent cheques to cover their entitlement. Regulations were passed in November 2016, providing clarification that Healthy Start vouchers would continue to be available to families in receipt of Universal Credit as long as their monthly household income was £408 or less per month.

Correspondence with the Healthy Start Issuing Unit in July 2018 suggests that those receiving Universal Credit may have difficulties claiming Healthy Start benefits. The HSIU reported that, for claimants on Universal Credit before the end of 2017, the HSIU receives an update from the Department for Work and Pensions every four weeks about claimants who qualify for the Healthy Start scheme. If potential beneficiaries have not applied, an invitation to apply is issued, and claimants would have to complete a Healthy Start application.

Those moving to Universal Credit from January 2018 have been set up on Universal Credit 'digital full service claims', meaning that they can view their accounts online for their Universal Credit claim. However, if these claimants want to claim Healthy Start, at present they need to contact the HSIU directly as DWP cannot provide details of qualifying beneficiaries. Potential beneficiaries would have to send in a new application form with

a copy of their latest Universal Credit award notice, and these are being processed manually. The HSIU and DWP are working to ensure data can be passed between the agencies by the end of 2018. It is not clear how potential beneficiaries would know they are entitled to Healthy Start.

The £408 threshold for Universal Credit is from any paid work the recipient may undertake. Claims coming to the HSIU from DWP are checked every four weeks and if a beneficiary goes for a period of 12 weeks earning over £408, receipt of Healthy Start vouchers will stop. Where claims are manually processed for those on the digital full service claims, the HSIU writes to claimants every 12 weeks to ask them to sign a disclaimer to advise that they are still under the £408 threshold.

The reduction in those eligible for and taking up the Healthy Start scheme are likely to be influenced by the current complications in applications and by the need for beneficiaries moving to Universal Credit to reapply or to know that they might be eligible for the scheme. Seasonal workers in particular are likely to be disadvantaged by the need to reapply for Healthy Start if their household income rises above £408 a month for more than 12 weeks.

Health professionals have also reported to the authors that there are delays in families receiving their vouchers, as well as in receiving Universal Credit itself, when they move to the Universal Credit scheme.

2.6 Healthy Start vitamins

Every eight weeks, families in the Healthy Start scheme receive Healthy Start vitamin coupons, which they can exchange for vitamins in their local area. The coupons are valid for:

- Healthy Start women's vitamin tablets, and
- Healthy Start children's vitamin drops.

Table 1 gives details of both these types of vitamins.



2.6.1 What do the Healthy Start vitamins contain?

Table 1: Healthy Start vitamins

	Healthy Start women's vitamin tablets	Healthy Start children's vitamin drops
Who they are for	Pregnant women and women with a baby under one year old	Infants and children up to their 4th birthday.
What they contain	The daily dose is one tablet, which contains: • 70 milligrams vitamin C • 10 micrograms vitamin D, and • 400 micrograms folic acid.	The daily dose of five drops contains: 233 micrograms vitamin A 20 milligrams vitamin C, and 7.5 micrograms vitamin D (from 2018/19: 10 micrograms vitamin D).
Other constituents		
Sugar	Yes	No
Salt	No	No
Colour	No	No*
Flavour	No	Yes (banana flavour)
Preservatives	No	No
Suitable for	 Suitable for vegetarians. Free from all other notifiable allergens (including wheat, fish, gluten, soy, egg). Halal 	 Suitable for vegetarians. Free from all other notifiable allergens (including wheat, fish, gluten, soy, egg). Halal
How they are provided	In bottles of 56 tablets. Recipients are entitled to one bottle every eight weeks.	In 10ml bottles, containing just over 56 daily doses. Recipients are entitled to one bottle every eight weeks.
Shelf life	Two years	10 months from manufacture
Classification	Classified as a food supplement	A General Sales List medicine**

 $[\]ensuremath{^*}$ There are no colours, but the flavouring may impart a yellow colour.

Healthy Start women's vitamin tablets are classified as a food supplement, so there are no restrictions on who may give them out. Healthy Start children's vitamin drops are currently classified as a General Sales List medicine. This means that, even though they are medicines, it is not necessary for a health professional or pharmacist to supervise their supply. The children's vitamin drops are being reformulated to include 10 micrograms of vitamin D from 2018/19, in line with the latest public health guidance (Public Health England, 2016). The new product will be licensed as a food supplement, so there will be no restrictions on who can give them out, and they will be suitable for use from birth.

^{**} From 2018/19 the Healthy Start children's vitamins will be reformulated and will be classified as a food supplement.

2.6.2 How are the Healthy Start vitamins distributed to those eligible for free vitamins?

Healthy Start vitamins are available at locally decided venues such as children's centres and health clinics. In some areas, midwives and/or health visitors carry Healthy Start vitamins with them to ensure that families receive them.

Trusts and boards must ensure that arrangements are in place to supply vitamin supplements for both adults and children. Maternity units can also supply them if they wish. In Scotland, vitamin coupons can be exchanged at health centres, some early years' centres and pharmacies, depending on the health board. In some areas the vitamins are only available directly from midwives and health visitors. In Northern Ireland, claimants need to send off the vitamin coupons, together with the Healthy Start letter they receive with their food vouchers, in order to receive the vitamins by post. It has been pointed out that pharmacists were not included in investigations of how Healthy Start vitamin distribution could be better coordinated, and that costs and logistical problems made distribution via community pharmacists problematic (McFadden et al, 2015).

In theory, the number of coupons exchanged for vitamins are collated in each local authority or health board area and returns are made to the Departments of Health in each UK country. The returns form needs to be signed by the Finance Director or another authorised officer at the local authority or health board, and by the person

responsible for collating the returned vitamin coupons locally. The local authority or health board is then reimbursed for the cost of the vitamins.

The All Wales Medicines Strategy Group (2016) has pointed out that distribution pathways for Healthy Start vitamins are currently inconsistent. Also, health centres have restricted daytime hours, and families with older children do not access their health visitor or baby clinic regularly. Anecdotal evidence suggests that many families do not keep their Healthy Start vitamin coupons, or are unaware that they receive them. This is consistent with the finding that, across the UK, only 3-10% of eligible families in the Healthy Start scheme exchange their coupons for vitamins (Jessiman et al, 2013; Moonan et al, 2012).

The short shelf life (approximately 10 months from manufacture) of the children's vitamin drops has also caused issues with wastage, particularly since uptake is currently low, so turnover of stock is slow (All Wales Medicines Strategy Group, 2016).

2.6.3 Areas offering free Healthy Start vitamins, either universally or part-universally

In some areas of the UK, free Healthy Start vitamins are provided to all pregnant women and/or young children as part of local public health initiatives. Many areas developed universal vitamin supplementation schemes, following the example of Birmingham (Moy et al, 2012). The schemes running as at July 2018 (to the best of our knowledge) are listed in Appendix 2.

2.7 Healthy Start food vouchers

Healthy Start beneficiaries get the following food vouchers (Healthy Start, 2018).

- Pregnant women get one Healthy Start food voucher a week, worth £3.10.
- Babies under the age of 1 year get two vouchers a week, worth a total of £6.20. (For premature babies, this continues until a year from their expected date of delivery.)
- Children aged over 1 year and under 4 years get one voucher a week, worth £3.10.

Food vouchers are sent to recipients once every four weeks and can be used in participating retailers to buy, or to supplement payment for, specific foods only: plain cows' milk (which can be fresh or UHT and with any fat content), plain fresh or frozen fruit and vegetables, or first cows' milk based infant formula (see page 31).

Retailers must be registered with the scheme to accept and claim payment for the vouchers. The retailer sends the vouchers to the Healthy Start Issuing Unit (HSIU), which then reimburses the retailer.

2.7.1 What can you buy with Healthy Start food vouchers?

The table on the next page shows what people can and can't buy with Healthy Start food vouchers.

No comprehensive review of the items that can be purchased with Healthy Start vouchers has been undertaken since the scheme was initiated. Changing population demographics would suggest a review is needed of milk and milk alternatives that can be bought with the vouchers. Other foods – such as canned fruit and vegetables, dried pulses and eggs – could provide additional dietary support, particularly for families who find it difficult to store fresh or frozen fruit and vegetables. Clarity is also needed over the

fact that only first infant formula can be purchased

with vouchers.

HEALTHY START PARTY START

What can you buy with Healthy Start food vouchers?

What can you buy with Healthy Start food vouchers?	Why is this included?	What you CANNOT buy with Healthy Start food vouchers
FRUITS AND VEGETABLES		
Plain fresh or frozen fruits or vegetables. These can be whole or chopped, packaged or loose.	Fruits and vegetables are good sources of fibre, vitamins such as vitamin A, vitamin C and folic acid and minerals such as potassium as well as other nutrients that have been associated with good health in pregnancy and the early years. Starchy vegetables also provide energy, fibre, and other useful vitamins and minerals. Eating lots of fruits and vegetables has been associated with less disease and may reduce the risk of heart disease, some cancers, bone disease and a range of other health conditions.	Dried, canned, juiced or precooked fruit and vegetables Fruit juices and smoothies or fruit purées Fruit or vegetables which have added ingredients such as fat (oil), salt, sugar or flavourings – including oven chips and battered onion rings. Fruit-flavoured items such as some yoghurts. Fruit and vegetable based baby foods sold in jars and pouches.

What can you buy with Healthy Start food vouchers?	Why is this included?	What you CANNOT buy with Healthy Start food vouchers
MILK Plain cows' milk: whole milk, semi-skimmed milk, 1% fat milk or skimmed milk. Milk can be pasteurised, sterilised, long-life or ultra-heat treated (UHT).	Milk is a good source of protein, calcium, magnesium, potassium, zinc and iodine, the B vitamin riboflavin and other vitamins such as vitamin A and vitamin B6. Many of the vitamins and minerals found in milk can support good bone health. Milk also provides other nutrients, such as iodine, which is essential for brain development in pregnancy and the early years.	Flavoured milk Coloured milk Evaporated milk Condensed milk Goats' milk Sheep's milk Soya milk alternative Oat milk alternative Nut milk alternatives Rice milk alternative Hemp milk alternative Hemp milk alternative rowdered milk (unless it is infant formula – see below) Milk with anything added to it, such as milkshakes or vitaminenriched milk
INFANT FORMULA		
Cows' milk based infant formula suitable from birth.	For infants who are not being breastfed, first infant formula can provide the nutrients necessary for proper growth and development. Infant formula can never replicate breastmilk as it does not contain protective factors passed on by the mother, but it is the only alternative recommended in the first year of life.	Any other type of infant formula, follow-on formula, or toddler milk.

Source: Making the Most of Healthy Start (First Steps Nutrition Trust, 2017).



How does Healthy Start differ from the WIC programme in the USA?

In the US, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides supplemental food, nutrition and health education, breastfeeding support and promotion, and referrals to health and social services, for pregnant, breastfeeding, and post-partum women, and their infants and young children (up to the age of 5 years) who are both low-income and at nutritional risk. Established as a pilot programme in 1972 and made permanent in 1974, WIC is administered at the Federal level by the Food and Nutrition Service of the US Department of Agriculture. Formerly known as the Special Supplemental Food Program for Women, Infants, and Children, WIC's name was changed under the Healthy Meals for Healthy Americans Act of 1994, in order to emphasise its role as a nutrition programme. WIC serves 53% of all babies born in the USA and in 2018 \$5.18 billion was allocated to the scheme.

Two major types of nutritional risk are recognised for WIC eligibility:

- medically-based risks such as anaemia, underweight, maternal age, history of pregnancy complications, or poor previous pregnancy outcomes
- diet-based risks such as an inadequate dietary pattern.

A woman's nutritional risk is determined by a health professional, based on Federal guidelines. The programme is designed to improve the nutrition and health of low-income pregnant women, new mothers, infants and young children by providing a tailored food package to meet their individual needs during critical periods of growth and development.

The income threshold for WIC is 185% of the federal poverty level although there can be additional eligibility criteria when a participant qualifies for another federal aid programme. In most States, WIC participants receive a food instrument (either a paper voucher or electronic benefit card – EBT) to buy a tailored food package each month that is designed to supplement their diets with specific nutrients tailored to the needs of the individual. There are 90 state WIC agencies, including the 50 geographic states, plus US territories and Indian Tribal Organizations. The main difference between States are the specific products included in the food packages. Some States have policies such as lowest cost items or store brands only, some allow organic food to be purchased and some don't. All States are in the process of transitioning from paper vouchers to an EBT card. There is a mandate from Congress for all States to shift to EBT by 2020 in an effort to modernise WIC.

Nutrition education is provided to participants to explain that WIC foods are specifically chosen to meet their health and nutrition needs, and to help them incorporate the foods into their overall diets, with information on shopping for value and nutrition, food preparation and cooking, reading labels, and making a positive change in overall dietary habits. Nutrition education takes place in a WIC clinic and can be provided one-to-one or in a group setting. An increasing number of WIC agencies are providing some nutrition education online.

WIC has been shown to be effective in improving the health of pregnant women, new mothers, and their infants. WIC participation has been shown to:

- reduce foetal deaths and infant mortality
- reduce low birthweight rates and increase the duration of pregnancy
- improve the growth of nutritionally at-risk infants and children
- reduce the incidence of iron deficiency anaemia in children, and

• improve the dietary intake of pregnant and postpartum women and improve weight gain in pregnant women.

Also:

- Pregnant women participating in WIC receive prenatal care earlier.
- Children enrolled in WIC are more likely to have a regular source of medical care and have more up-to-date immunisations.
- WIC helps get children ready to start school: children who receive WIC benefits demonstrate improved intellectual development.
- WIC significantly improves children's diets.

(United States Department of Agriculture Food and Nutrition Service, 2018)

Breastfeeding promotion and support in WIC

This includes:

- anticipatory guidance, counselling, and breastfeeding educational materials
- a greater quantity and variety of foods
- longer participation in the programme, and
- breastfeeding aids such as breast pumps.

WIC supports and promotes breastfeeding as the optimal infant feeding choice. Women who are fully breastfeeding are eligible for an enhanced food package containing more fruits and vegetables, milk and eggs as well as cheese and canned fish. Data available on the average food package cost for a breastfeeding woman in 2010 suggested a 38% higher cost of \$49.16 per month, compared to \$35.54 for a non-breastfeeding woman (Vericker et al, 2013).

Fully breastfeeding women are also able to stay on WIC for longer to support and incentivise longer breastfeeding duration. WIC breastfeeding initiation rates increased from 42% in 1998 to 71% in 2016. The programme is now focused on increasing the length of time that women choose to breastfeed. Research shows that, at 12 months post-partum, 18% of WIC mothers are still breastfeeding. This is a vast improvement: in the 1980s only 7% of WIC mothers were breastfeeding at 12 months (May et al, 2016). A survey of WIC participants in New York reported that breastfeeding initiation rates increased from 62% to 83.4% between 2002 and 2015, and disparities between ethnic groups in breastfeeding initiation rates also substantially decreased (Lee et al, 2017). For infants of women who do not fully breastfeed, WIC provides infant formula.

All WIC clinic staff are trained to promote breastfeeding and provide the support that new breastfeeding mothers and infants need (United States Department of Agriculture Food and Nutrition Service, 2017). A breastfeeding peer counselling programme was rolled out in 2004, following the recognition that lower-income women are less likely to breastfeed and more likely to need support, and that increased breastfeeding rates would save the Government money in Medicaid and other costs. Ninety-three per cent of state WIC agencies manage local WIC agencies that operate a peer counselling breastfeeding program.

For more information about the WIC programme, see https://www.fns.usda.gov/wic/women-infants-and-children-wic



What has happened to eligibility for, and uptake of, Healthy Start since 2006?

he Healthy Start scheme aims to act as a nutritional safety net for young and low-income pregnant women and for families on a low income with children under 4 years of age. Since it was introduced in 2006, the number of women and children eligible for the benefit, the number of eligible beneficiaries who take up the benefit, and the Government spend on the scheme, have all decreased.

In Healthy Start ...

Eligibility refers to the number of people who are eligible to apply for Healthy Start.

Entitled refers to people who have applied to the Healthy Start scheme and have had their claim validated.

The uptake rate is the percentage of eligible people who have applied to the Healthy Start scheme and have had their claim validated.

The redemption rate is the number of vouchers that have been reimbursed to a retailer, as a percentage of the total number of vouchers issued.

3.1 How many people are eligible for Healthy Start?

When the Healthy Start scheme was first proposed, it was suggested it would reach 800,000 people in low-income families (Department of Health, 2002a). In November 2006, it was reported by Rosie Winterton in a Parliamentary Question that, under the Welfare Food Scheme (before Healthy Start was introduced), about 700,000 people were getting milk tokens. Inconsistent data are available on eligibility for Healthy Start before 2011. Data obtained from the Department for Work and Pensions (DWP) and HM Revenue and Customs (HMRC) on those eligible for the scheme indicate that the number of eligible beneficiaries fell from 717,066 in 2011 to 499,697 in 2018. (See Figure 2.)

The Department of Health uses data that are sourced from the Department for Work and Pensions and HM Revenue and Customs, and does not typically know that a woman is pregnant until the Healthy Start application is made. Under Universal Credit, this is supposed to change, as families in which there is a pregnant woman are

supposed to inform the DWP. Data on eligibility for Healthy Start among pregnant women will therefore only be an estimate, which may impact on the accuracy of uptake data. In contrast, for children, eligibility is documented through other entitlements such as Child Benefit, which have almost universal coverage soon after birth.

Figure 2 shows the number of individuals eligible for Healthy Start from 2011 to 2018.

3,1,1 Why has eligibility declined?

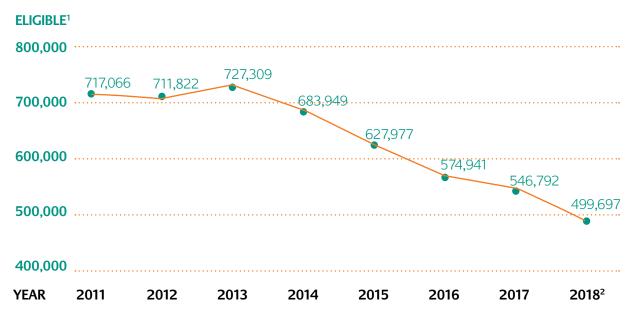
The amount of income Healthy Start recipients can earn has been frozen at the same level since 2009. (Where Universal Credit has been introduced, a different income threshold is in place.) In parallel with this, there have been increases in the minimum wage and the introduction of the National Minimum Wage, which means that fewer families are now eligible for the scheme (even though, as prices and housing costs have increased, families' financial circumstances may not have changed, or may have worsened). The initial introduction of Universal Credit led to a reduction in the uptake rate as the application form did not recognise Universal Credit. Families needed to phone the

HSIU separately and some were sent cheques, and : This is not accounted for by a reduction in health professionals reported being unclear about eligibility for families receiving Universal Credit.

Our research has found that the number of people eligible for Healthy Start in the UK has declined by 30% over the period 2011-2018.

the birth rate, since the birth rate in the UK decreased by only 6%, from 807,819 live births in 2011 to 756,381 in 2017. (See Table 2.)

Figure 2: Number of beneficiaries eligible for Healthy Start in the UK, 2011-2018



^{1 &#}x27;Eligible' = those who meet the criteria for Healthy Start as assessed by DWP. Data are based on uptake in December of the year highlighted since data are reasonably consistent month to month.

Source: Data supplied by the Healthy Start Issuing Unit, 2018.

Table 2: Live births in the UK, 2011-17

YEAR	England and Wales*	Scotland**	Northern Ireland***	Total
2011	723,913	58,633	25,273	807,819
2013	698,512	57,296	24,277	780,085
2015	697,852	55,984	24,215	778,051
2017	679,106	54,199	23,076	756,381

Sources

² Data for January 2018.

^{*} Birth Summary Tables, England and Wales. https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/ livebirths/datasets/birthsummarytables

^{**} National Records of Scotland. http://www.isdscotland.org/Health-Topics/Maternity-and-Births/Births

^{***} Northern Ireland Statistics and Research Agency. https://www.nisra.gov.uk/publications/monthly-births

Uptake by under-18s

The number of under-18s who become pregnant and keep their baby has also declined. (Office for National Statistics, 2018a). In 1998, the then Labour government set a target to halve teenage pregnancies by 2010. In 2015 there were 21 pregnancies among every 1,000 girls under 18, half the 2005 rate of 41.5 per 1,000. In addition there were more terminations in younger women (51% of under-18s who became pregnant had a termination in 2015), so fewer young women qualified for Healthy Start. Since 2012 there have also been fewer pregnancies in women younger than 25 years of age, who are more likely to qualify for Healthy Start (Office for National Statistics, 2018a).

Since all pregnant women under 18 years of age are eligible for Healthy Start, it might be thought that uptake would be higher in this group. There were 5,025 births to women under 18 years old in England, 392 in Wales, 831 in Scotland, and 199 in Northern Ireland in 2016 (Office for National Statistics, 2018c; NHS National Services Scotland, 2017; Northern Ireland Statistics and Research Agency, 2017). That is a total of about 6,447 births in under 18 year olds in the UK. In addition, some of the women who gave birth at 19 would have been eligible for Healthy Start. Data from the Healthy Start Issuing Unit suggests that between 1,100 and 1,400 pregnant women under 18 years of age in the UK successfully claimed Healthy Start vouchers on a monthly basis in 2016, suggesting that around 8 out of 10 young pregnant women are missing out on the scheme.

3,1,2 What will happen to eligibility under Universal Credit?

Universal Credit beneficiaries are eligible for Healthy Start if they have a household income of £408 or less per month. It is highly likely that this will impact on eligibility but currently no information is available on what the impact may be. A Parliamentary Question was tabled on 22 March 2018 to ask the Secretary of State for Health and Social Care what assessment has been made of the effect of the introduction of Universal Credit on uptake rates for Healthy Start benefits among families in receipt of Universal Credit. Jackie Doyle-Price responded but did not answer the question, simply repeating the eligibility criteria. She also reported that "arrangements are in place to support Healthy Start beneficiaries who are transitioning to Universal Credit, and those who are applying for Universal Credit for the first time" but it is not clear what these arrangements are. As reported earlier, since the start of 2018 it appears that new Universal Credit applicants need to reapply to Healthy Start with manual checking of eligibility at the HSIU. The Department of Health confirmed in June 2018 that all children under the age of 4 years in a family in receipt of Universal Credit remain eligible for Healthy Start, and this benefit is not affected by the two-child rule for family tax credit benefits.

In the Scottish Government consultation on Welfare Foods in 2018, it was suggested that the threshold below which Universal Credit recipients would no longer be eligible for welfare food benefits would be £610 per month (Scottish Government, 2018b). This amount was selected to align more closely with the qualifying benefits for 2 year olds in Early Learning and Childcare.

3.2 How many eligible people take up the Healthy Start benefit?

Figure 3 shows the decline in uptake between 2011 and 2018, with a current uptake rate (in 2018) of about 66%.

Figure 3: Individuals eligible for and entitled to Healthy Start, 2011-2018



^{&#}x27;Eligible' = those who meet the criteria for Healthy Start as assessed by DWP. Data are based on uptake in December of the year highlighted since data are reasonably consistent month to month.

^{&#}x27;Entitled' = beneficiaries who have applied and had their claim validated.

[%] Percentage of eligible people who receive Healthy Start.

^{*} Data from January 2018 only. Source: Data from the Healthy Start Issuing Unit.

3,2,1 Variations in uptake rate by region

Whilst it is estimated that the average uptake rate across the UK is about 66%, this varies by area, with the lowest uptake reported in 2018 as 47% and the highest as 84%. Data for the top ten highest and lowest uptake rates in local authority areas in England are shown in Table 3.

Table 3: Local authority areas in England with the highest and lowest uptake rates of Healthy Start

HIGHEST RATES OF UPTAKE			LOWEST RATES OF UPTAKE		
Local authority area	Number of households	Uptake (%)	Local authority area	Number of households	Uptake (%)
Hartlepool	572	84%	Devon	1,584	56%
Newcastle upon Tyne	1,442	82%	Hampshire	2,728	56%
Halton	448	82%	Hertfordshire	2,731	55%
Bath & North East Somerset	263	81%	Surrey	1,887	54%
Redcar and Cleveland	1,045	77%	Bracknell Forest	201	54%
Northumberland	1,279	75%	Redbridge	761	54%
Gateshead	1,043	75%	Rutland	33	53%
Stockton-on-Tees	1,223	75%	Buckinghamshire	1,032	52%
Swindon	620	74%	Wokingham	182	52%
Nottingham	2,867	74%	Windsor and Maidenhead	193	47%

Source: Data from a Parliamentary Question to Jackie Doyle-Price on 30 April 2018.

3,2,2 Why has uptake declined?

McFadden et al (2014) found in their review that some women reported that they had never heard of Healthy Start or knew very little about it, especially women who did not speak English. This was true even for women who were in regular contact with health services.

"I'm six month pregnant and until today I didn't know I was able to get Healthy Start."

Interviews with 40 low-income women in Scotland looking at why Healthy Start vouchers were not taken up, reported that lack of awareness of the scheme was the major factor, particularly when women were pregnant (Browne et al, 2016). Health professionals suggested that the reasons for this included:

 Healthy Start information could be lost in the mass of other information given to women at booking visits. Healthy Start information in languages other than English or appropriate for women with low literacy was not available.

A Quality Improvement Project in Leith (MacKenzie and Dougall, 2016) found that midwives were reluctant to discuss Healthy Start with pregnant women. Also, they reported that about two-thirds of pregnant women struggled to complete their sections of the form. Applications were rejected because the ink was the wrong colour, writing had strayed outside the printed boxes, and lower case letters had been used when capitals were required. Other problems included women being unable to read the form, their partners being reluctant to complete the section on income and benefits, and people forgetting to send off the form.

It seems likely that the multiple messages which both midwives and health visitors have to convey to women in pregnancy and the early years of their child's life may lead to a reduction in communication about Healthy Start unless those health professionals are specifically prompted to do this (Scottish Government, 2015).

With the change in commissioning of Healthy Start in England to local authorities in 2015, in some areas it is likely that it was not clear who was responsible for ensuring the effective delivery of Healthy Start. This means that some areas collect data on the number of applications for Healthy Start in their area and the number of vouchers exchanged, so that uptake rates can be estimated, but in other areas no-one is considering these data.

In London, for the report *Beyond the Food Bank* (Sustain, 2017), all London boroughs were asked for information about their actions to support Healthy Start, but not all boroughs submitted responses. In the most recent report (2017), 12 London boroughs provided no information on their activities around Healthy Start, 8 were taking some measures to promote it, and 12 were taking a significant number of actions to support the scheme.

The Department of Health and Social Care suggested to the authors of this report that another reason for a decline in uptake may be that, as the 'eligible pool' of households reduces (because more people are in work), the remaining pool is likely to comprise of more hard-to-reach groups (for example, those with dependencies, those who are less literate, and those who move home more frequently).

How much money are families losing by not taking up Healthy Start?

The HSIU provided information in July 2018 that the average number of vouchers issued per beneficiary is 1.425 – equivalent to £4.42 per household per week (and about £230 per year). We estimate that the loss of revenue to the 181,228 eligible families in the UK who did not take up Healthy Start in 2017 (the number eligible less the number entitled) was around £41.6 million. If uptake rates were increased to 80% of eligible families this would be equivalent to £33.3 million.

3,3 What is the redemption rate for Healthy Start food vouchers?

The redemption rate is the number of vouchers that have been reimbursed to a retailer, as a percentage of the total number of vouchers issued.

One evaluation of the Healthy Start scheme reported that approximately 90% of the vouchers sent out were reimbursed to retailers (McFadden et al, 2014). The redemption rate for food vouchers fell from around 91% in 2011 to 86% in 2018. (See Table 4.)

Table 4: Redemption rate for Healthy Start food vouchers, 2011-18

YEAR	Redemption rate
2011	91%
2012	92%
2013	92%
2014	91%
2015	90%
2016	89%
2017	86%
2018*	86%

^{*} Based on data for January 2018.

Source: Data supplied by the Healthy Start Issuing Unit, 2018.

3.3.1 Why have redemption rates declined?

A proportion of vouchers will never be claimed by the retailer due to administrative loss, but some are lost by or never received by the beneficiary to use – for example, if they move home between initiating the claim and the vouchers being sent out.

Focus groups, run as part of a campaign to increase the proportion of families who receive the Healthy Start vouchers they are entitled to, found that families sometimes said that they did not receive the vouchers that they were expecting. The envelope is marked with the Healthy Start message and it is possible that some are picked up by other people, especially in housing of multiple occupation, where post is visible for all to see (Brighton and Hove Food Partnership, 2017).

3.4 How many retailers accept Healthy Start food vouchers?

In 2006 Caroline Flint reported, in response to a Parliamentary Question, that under the Welfare Food Scheme milk tokens had been accepted by 19,100 retailers in the UK. She reported that, under Healthy Start, the target was for 35,000 retailers and 40,000 outlets to accept the vouchers. During the pilot phase of Healthy Start in Devon and Cornwall, the number of retailers increased from 500 to 1,000, justifying the national target set. In 2009, a Parliamentary Question to Gillian Merron revealed that by that time 28,842 retail outlets had registered to accept Healthy Start vouchers.

In a Department of Health Equality Impact Assessment of Healthy Start, it was noted that many minority ethnic families rely heavily on small and specialist shops which may not be registered to accept Healthy Start vouchers (Department of Health, 2010). It was reported that, as part of the retailer recruitment, 20,000 retailers that had previously provided milk through the welfare food scheme were sent a direct mailing, as were 30,000 retailers of various sizes known to accept money-off coupons. Advertisements were also placed in a variety of trade magazines including the *Asian Trader* and *Convenience Store* magazines, and trade associations were asked to promote the scheme to their members.

In 2010 it was reported that 73% of all vouchers were spent in supermarkets, 15% in independent or franchised multiple retailers, 5% with doorstep milk deliverers, 5% with chemists and the remainder with food cooperatives, box schemes or market traders (Department of Health, 2010).

In the Department of Health's 2012 research on retailers for Healthy Start, it was reported that more than 15,000 retailers and 30,000 retail outlets throughout the UK accepted Healthy Start food vouchers (Department of Health, 2012). More recent estimates of the number of retailers accepting vouchers are not available, but at a local level it has been reported to the authors that greater numbers of markets and community fruit and vegetable schemes are being registered in some areas.

3,5 Uptake of Healthy Start vitamins

There are no accurate data on the current number of Healthy Start recipients who exchange their Healthy Start coupons for vitamins. An evaluation by McFadden et al (2014) showed that only 1% of vitamin coupons were redeemed. This may be because local authorities do not process the coupons to claim their reimbursement, or because they are not used by recipients.

Some areas have developed universal vitamin supplementation schemes, following the example of Birmingham (Moy et al, 2012). Some provide all pregnant women with one bottle of vitamin tablets and encourage them to buy subsequent supplies, whereas in other areas, all women are offered vitamin supplements throughout pregnancy and all children who are not taking 500ml of formula milk are provided with vitamin drops (see section 2.6.3). The number of local authorities that have implemented universal vitamin supplementation schemes has, nevertheless, increased (see Appendix 2) and Scotland introduced a policy of universal supplementation for pregnant women in April 2017.

McFadden et al (2015) published evidence from a large qualitative study based on focus groups with health visitors, midwives, public health practitioners, GPs, paediatricians and support staff, an online consultation and stakeholder workshops of participants representing health and social care practitioners, policy-makers, service commissioners, and those from the voluntary and independent sectors. Participants in this study were concerned about the low uptake of Healthy Start vitamin supplements and the consequences of this for health outcomes for women and young children. Healthy Start vitamin distribution was seen as logistically complex, requiring the time, resources and creative thinking of a range of local and regional staff at all levels. Many health practitioners argued that moving to universal provision of vitamin supplements would be more cost-effective than offering the vitamins only to Healthy Start participants, concluding that there was significant professional and voluntary sector support for moving from a targeted system to

provision of free vitamin supplements for all pregnant and new mothers, and children up to their fifth birthday.

The 2010 UK Infant Feeding Survey reported that: 30% of breastfeeding Healthy-Start-registered mothers were taking Healthy Start vitamins when their infant was 4-10 weeks old, rising to 44% at 8-10 months of age; and 13% of registered mothers were giving their child Healthy Start vitamin drops at 4-6 months of age, rising to 19% at 8-10 months (McAndrew et al, 2012).

One study of 13 primary care trusts across all regions of England reported uptake of Healthy Start vitamins to be below 10% (Jessiman et al, 2013). Another reported it to be less than 3% (Moonan et al, 2012). In the Scottish Maternal and Infant Nutrition Survey, one-third of parents gave vitamin drops to babies at 8-12 months and, of these, 29% received free Healthy Start supplements (Scottish Government, 2018a). Jessiman et al (2013) interviewed Healthy Start coordinators, healthcare professionals and parents to find out what the barriers were to vitamin uptake. Reasons commonly reported were poor accessibility, low promotion of the scheme, lack of awareness and low motivation by mothers to take the vitamins or give them to their children. In a more recent study in the UK where young pregnant women were recruited by online survey (self-selected sample), 93.2% of young women reported taking vitamin supplements at some stage of pregnancy and 54.6% reported taking vitamins regularly (Soltani et al, 2017). Those who took supplements less frequently reported that this was due to forgetting to take them, but health professionals interviewed in the same study reported that some young women had problems with applications for Healthy Start and accessing Healthy Start vitamin supplements. Some health professionals noted that those young women motivated to take supplements were more likely to buy them from a supermarket than wait for Healthy Start vitamin vouchers to come through.

3.6 Government spending on the Healthy Start scheme from 2006 to 2018

Most of the information on Government spending on Healthy Start has come from Parliamentary Questions, but it is not always clear exactly which elements of the scheme are included in the responses. We have gathered together the responses and these are reported in Table 5.

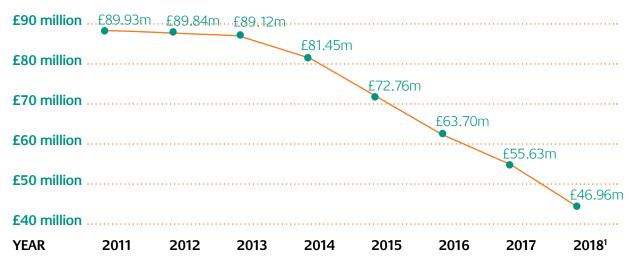
Table 5: Information on the reported Government spend on the Healthy Start scheme Figures are for the UK unless stated otherwise.

Date reported	Period for which data were reported	Where information found	Reported annual spend
28 October 2002		Department of Health press release	£142 million*
14 December 2005		Parliamentary Question to Caroline Flint	£135 million*
30 June 2008	2007/2008	Parliamentary debate on Food Security: Hilary Benn	£100 million
6 October 2008	2007/2008	Parliamentary Question to Dawn Primarolo	£94 million (suggested as an estimate, as not all vouchers may have been redeemed in the period)
31 March 2014	2010/2011	Parliamentary Question to Jane Ellison (retrospective response)	£105.3 million
7 January 2017	2010/2011	Parliamentary Question to Nicola Blackwood (retrospective response)	£91 million (England only)
31 March 2014	2011/2012	Parliamentary Question to Jane Ellison (retrospective response)	£105.2 million
7 January 2017	2011/2012	Parliamentary Question to Nicola Blackwood (retrospective response)	£90 million (England only)
31 March 2014	2012/2013	Parliamentary Question to Jane Ellison (retrospective response)	£104.9 million
7 January 2017	2013/2014	Parliamentary Question to Nicola Blackwood (retrospective response)	£82 million (England only)
7 January 2017	2014/2015	Parliamentary Question to Nicola Blackwood	£74 million (England only)
14 July 2015	2014/2015	Parliamentary Question to Jane Ellison	£82.8 million
21 January 2015	2015	Parliamentary Question to Dan Poulter (estimate for year ahead)	£85 million
7 January 2017	2015/2016	Parliamentary Question to Nicola Blackwood (retrospective response)	£64 million (England only)
2016	2016	Department of Health, Childhood Obesity, A Plan for Action	£60 million (England only)
27 June 2018	2016/2017	Parliamentary Question to Jackie Doyle-Price	Unable to give figure for Healthy Start spend for 2016/2017 or for 2017/2018

^{*} These were figures suggested, before the scheme had started, as the amount that would be spent on Healthy Start.

Figure 4: Estimated Government spend on Healthy Start food vouchers in the UK, 2011-2018

Estimated annual spend



^{1 2018} data are based on data provided on the average number of vouchers issued in April, May and June 2018.

All Parliamentary Questions and debates can be accessed from Hansard records at www.theyworkforyou.com

Publicly available annual data on those eligible for Healthy Start, and the uptake of and spend on the scheme across the UK are needed as currently data on the scheme are not always consistent or easily available.

It is interesting to note that in a Parliamentary Question to Stephen Barclay in the Department of Health on 21 February 2018, it was revealed that the value of the contract to Serco to administer the Healthy Start scheme was £12,106,732. The period the contract covers was however not specified.

It is evident that the spending on Healthy Start has declined considerably. The decline has been particularly steep since 2014. Comparing data on the overall spend on the Healthy Start scheme is difficult, so to show decline in spend consistently since 2011 the amount spent on Healthy Start food vouchers alone has been compared. (See Figure 4.) These data are based on the average number of food vouchers issued per year, adjusted by the redemption rate, using data supplied by the Healthy Start Issuing Unit. These are our calculations and do not include costs for Healthy Start vitamins or administration of the scheme.

3.7 A new era of family food poverty

Despite eligibility for and uptake of Healthy Start significantly declining in the past five years, there has been an increase in the reporting of family food poverty as Government austerity measures have reduced or frozen benefit entitlements. This decrease in uptake of the Healthy Start scheme therefore needs to be considered alongside the backdrop of increasing family food poverty in the UK.

Austerity and welfare reform in the UK since 2010 has resulted in substantial reductions in public spending, and women and families have been among the most affected groups (Keen and Cracknell, 2017). Local government budgets decreased significantly between 2009-10 and 2014-15, with spending per person reduced by 23.4% on average (Innes and Tetlow, 2015), and benefit levels have been frozen or reduced (Joseph Rowntree Foundation, 2017). Responsibility for the Healthy Start scheme was devolved to public health departments at local authority level in 2015. Substantial cuts to local services have hit the more deprived local authorities in the UK hardest (British Medical Association, 2016a). The reduced spending occurred across the UK, although in Scotland local

government budget cuts were less severe than in England (British Medical Association, 2016a). The 2015 Comprehensive Spending Review announced a cut to public health budgets of 3.9% a year. This is in addition to the 2015/16 cut of 6.2% to local authorities' public health grant (British Medical Association, 2016b).

The impact has been to hamper progress in reducing inequality and poverty: fewer households achieving a minimum income for healthy living; increases in relative child poverty; and increasing levels of deprivation. All of these can have a negative impact on health and wellbeing. It is clear that many of the most vulnerable groups have been disproportionately affected, including individuals, families and children on benefits or low incomes, as well as those unable to work because of disability or long-term illness.

Data from the Child Poverty Action Group suggests that there were 4.1 million children (30%) living in poverty in the UK in 2016-17 (Child Poverty Action Group, 2018). Data on projections for child poverty in the UK, based on incomes after housing costs, suggest that the proportion of children living in relative poverty is expected to increase sharply from 30% in 2015/2016 to 37% in 2021/2022 based on incomes after housing costs (House of Commons Briefing Paper, 2018). A report from the Royal College of Paediatrics and Child Health on The State of Child Health in 2017 reported that poverty was having a significant impact on child health and that this was a major cause for concern, with the UK ranked 15 out of 19 western European countries on infant mortality (Royal College of Paediatrics and Child Health, 2017).

Between 2007 and 2016 the price of all foods rose, with vegetables increasing in price by 18% and fruit by 40% (Department for Environment, Food and Rural Affairs, 2017).

3,7,1 Food insecurity in UK families

'Food insecurity' is a social and economic problem that involves difficulties in accessing sufficient, safe and nutritious foods necessary to meet an individual's dietary requirements and preferences for a healthy life (Food and Agriculture Organization, 2001). The measurement and definitions of food insecurity vary, but often includes measures such as skipping meals, reducing the amount eaten, and going without food. Subsequent to rising food prices, a freezing of benefit levels with increasing sanctions, and high levels of debt among low-income families, food insecurity is a growing problem in the UK (End Hunger UK, 2017). There remains no consistent measurement of food insecurity in the UK for adults or children.

A global survey by UNICEF reported that, in the UK, 19.5% of children under the age of 15 live with an adult who is moderately or severely food insecure, and 10.4% live with an adult who is severely food insecure (Pereira et al, 2017). The UK has the highest proportion of moderately food insecure children among European countries and the proportion is only marginally lower than that in the US. The proportion of children who are severely food insecure in the UK is notably higher than for all other developed countries reviewed by UNICEF. The proportion of children under the age of 15 living in a food-insecure household in the UK is twice as high as the official rate of poverty for children under 18 years (Food Foundation, 2016; Pereira et al, 2017).

According to UNICEF:

"Children who are exposed to food insecurity are more likely to face adverse health outcomes and developmental risk. Food hardship among children also predicts impaired academic performance, and is positively associated with experiencing shame at being out of food, and behavioural problems."

(Pereira et al, 2017.)

It is well recognised that mothers experiencing food insecurity often go without meals themselves in order to feed their children (End Hunger UK, 2017). In a small survey conducted for the End Hunger campaign, 23% of parents reported skipping or seeing someone in their household skipping meals, and 8% of adults had gone a whole day without eating in the previous 12 months because of lack of money (End Hunger UK, 2017).

Families with dependent children, particularly single parents, are more likely than other family types to use food banks, and this is particularly the case where there are three or more children in a family (Loopstra et al, 2018). Latest figures from the Trussell Trust (which does not represent all food banks in the UK) reported that 1,332,952 three-day emergency food parcels were distributed between April 2017 and March 2018, and of these 484,026 went to children (Trussell Trust, 2018). There is concern that families will face increasing hardship as they will not be entitled to claim for the child element of Tax Credit and Universal Credit for a third and subsequent child following rule changes in April 2017 (although this does not affect Healthy Start eligibility). Families with children particularly suffer when the costs of living rise, and this is worrying considering food inflation and ongoing caps on benefits (Loopstra et al, 2018).

"Women are often in a dilemma about whether they should or shouldn't eat healthy foods because something else is needed more. Their own health and maybe the health of their younger children are on the back burner because something else is more pressing." (Midwife, quoted in Lucas et al, 2013.)

Information for food banks, to help them support pregnant women and young families, can be found at www.

firststepsnutrition.org



3.7.2 The impact of food insecurity on health

Both acute and chronic food insecurity is likely to impact on the health and wellbeing of adults and children (Loopstra et al, 2018). It has been shown that food insecurity is associated with poorer diets among children (Kirkpatrick and Tarasuk, 2008), and food insecurity can result in stress

and depression among caregivers, which can also impact child health (Ashiabi and O'Neal, 2007).

Insufficient access to food can result in compromised health for a number of reasons. It can lead to the adoption of risk-averse food purchasing habits, where, in the face of having little to spend, households prioritise buying foods that will not go to waste and that are energy-dense (Jones et al, 2018). Often this means a reliance on cheap foods that are nutrient-poor but calorie-rich, potentially putting individuals at risk of weight gain and obesity. Food insecurity is also associated with inadequate intakes of certain nutrients and fruits and vegetables.

Importantly, the stress of not having sufficient amounts or types of food within households causes harm to socio-emotional wellbeing, impacting on child development and mental health. The poor health outcomes lead to increased costs across the economy: days lost without pay, low school achievement, and child welfare costs. Whilst there is no information available on the impact of food insecurity on the health and wellbeing of young children in the UK, information from the US Early Childhood Longitudinal Study of children aged 5 and 6 years found that children who were food insecure had significantly lower academic achievement scores in reading, maths and science and poorer scores for interpersonal skills and self-control (Kimbro and Denney, 2015). Johnson and Markowitz (2017), using data from the same study, reported that food insecure children were more likely to be hyperactive and have behaviour problems, and associations have been made between household food insecurity and developmental delay in children aged 4-36 months (Rose-Jacobs et al, 2008).

Not surprisingly, food insecurity is also associated with increased costs for the healthcare system. Recent evidence from Canada has shown that food-insecure people use health care services much more than those who are food secure. People who were severely food insecure had annual health care costs which were 121% higher than those who were food secure (Tarasuk et al, 2015).



Why do we need a nutritional safety net for young and low-income pregnant women, and low-income families?

mproving the nutritional status of women of child-bearing age, infants and young children has the potential to improve the health of future generations." Scientific Advisory Committee on Nutrition, 2011

The first 1,000 days, from conception to a child's second birthday, are the foundation to the future health of a child, and appropriate nutrition is a key part of this journey. Foetal life and early childhood are the periods of life with the most rapid growth and development. The Scientific Advisory Committee on Nutrition (SACN) points out that an imbalanced nutrient supply at this stage may alter body structure and function in a way that increases the risk of chronic disease and, in girls, may limit the ability to meet the nutritional and other stresses of reproduction. This means that the nutritional status of pregnant women, infants and young children has implications for the health of both current and future generations (Scientific Advisory Committee on Nutrition, 2011).

4.1 The importance of maternal nutrition

During pregnancy, good nutrition is especially important in supporting foetal development and reducing the chance of pregnancy-related risks, such as excessive weight gain, gestational diabetes, pregnancy-induced hypertension, and micronutrient deficiencies (Symonds, 2010). Poor maternal nutritional status is one of several contributing factors to low birth weight (Da Silva Lopes et al, 2017). Low birth weight, defined as a birth weight of less than 2,500g, is associated with a greater risk of infant mortality and childhood morbidity. In England and Wales, 7% (48,490) of live births were low-birthweight in 2016, unchanged since 2011 (Office for National Statistics, 2017). Foetal growth restriction and poor growth early in infancy are recognised as important determinants of neonatal and infant mortality, and of overweight and obesity in older children and adults (Black et al, 2013).

While the causal pathways are not always clear, rates of adverse pregnancy outcomes, including pre-term birth and especially intrauterine growth restriction, generally rise with increasing socioeconomic disadvantage (Kramer et al, 2000; Scientific Advisory Committee on Nutrition, 2011). During pregnancy, women with low socio-economic status are more likely to face

stressful life events and chronic stressors, and to experience low gestational weight gain. They are also less likely to initiate early antenatal care and late booking is more of a risk for women living in the most deprived areas (Public Health England, 2018). Some women may have higher rates of underlying physical and mental health conditions which put them at increased risk for poor obstetric outcomes such as intrauterine growth restriction (or being small for gestational age) and premature birth (Lephard and Haith-Cooper, 2016). Premature birth complicates 5%-10% of pregnancies in the UK and is the major cause of perinatal morbidity and mortality in the developed world (Salvig and Lamont, 2011).

There are large inequalities in food intake across the UK, and the link between poor nutrition and low socio-economic status has been frequently reported (Bates et al, 2014; Department of Health, 2005). For example, families on a low income are much less likely to eat five portions of vegetables and fruit a day (Nelson et al, 2007). Several small studies have reported low micronutrient intakes in pregnant women in the UK, particularly among those from more socially deprived areas (Rees et al, 2005a; 2005b; Mouratidou et al, 2006). A study of 1,461 women in Aberdeen found that the most deprived women consumed diets lower in protein, fibre, vitamins and minerals. The diets of the more deprived women were characterised

by low intakes of fruit, vegetables and oily fish and higher intakes of processed meat, fried potatoes, crisps and snacks (Haggarty et al, 2009). Lower educational attainment has also been associated with poor diet in women of childbearing age (Robinson et al, 2004). Women from deprived social backgrounds are thus more likely to exhibit poor dietary patterns at conception and are more likely to have inadequate levels of some micronutrients (Scientific Advisory Committee on Nutrition, 2011).

Information on Eating Well for a Healthy Pregnancy can be accessed at www.firststepsnutrition.org

women with low folate intakes, regardless of their supplement use and after adjustment for confounding factors (Baker et al, 2009).

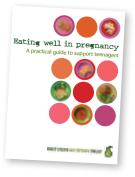
Data from the Maternity Services Dataset analysed by Public Health England suggest that young women aged under 18 were less likely to be taking folic acid at their booking appointment than older women. About half of young women in this age range were recorded as taking folic acid, although there were a large number of records where this data item was missing (Public Health England, 2018). Folic acid use in early pregnancy also varies by level of deprivation, with more women in the most deprived areas failing to take supplements (10%) in comparison to those in least deprived areas (3%).

Recent data, however, also suggest that young women do make changes to their diet in pregnancy to eat more fruit, vegetables, milk and breakfast cereal, and are receptive to advice and support on eating well (Soltani et al, 2017). Young pregnant women have also been reported to value healthy eating and aspire to eat well during pregnancy (Ohly et al, 2018). Spending money on a healthy diet may, however, be a lower priority for younger women as they may have many other competing priorities including housing (Burchett and Seeley, 2003). Ensuring young women are supported with Healthy Start vouchers to enable them to make dietary changes recommended to them, and to prevent the poor birth outcomes reported in this group, should remain a priority. As young women are considered to be those under the age of 20 years, extending the age below which all women are eligible for Healthy Start would be a prudent public health measure.

Our report Eating Well in Pregnancy: A Practical Guide to Support Teenagers can be accessed at www.firststepsnutrition.org



Poor nutrition and adverse outcomes such as stillbirth, preterm birth and low birth weight have frequently been reported among pregnant adolescents (Hall-Moran, 2007; Chen et al, 2007). Young or adolescent mothers (under 19 years of age) have specific requirements for macro- and micronutrients to support foetal development, as well as to meet their own growing needs (Scholl et al, 1994). Babies born to women aged under 20 have around a 20% higher risk of low birth weight (Office for National Statistics, 2018b). Data on the diets of adolescents show that their diets are typically lower in important micronutrients such as iron, zinc, calcium and folate and a study conducted among pregnant teenagers (aged 14-18 years) in London and Manchester found median iron and folate intakes were lower than UK recommended amounts (Baker et al, 2009). Fiftytwo per cent of the women had iron deficiency anaemia, and 30% had low blood vitamin D levels. The incidence of small for gestational age births was also higher in young women with poorer folate status (measured both as red blood cell folate and as serum folate), and in young



4.3 The importance of appropriate infant nutrition

Infancy describes the period from birth to 12 months of age, and is a critical period of development. It is well established that infant feeding in the first year of life impacts on both short-term and long-term health outcomes.

4,3,1 Breastfeeding

All Departments of Health or of Health and Social Care in the UK recommend that infants are exclusively breastfed for the first six months of life, and that breastfeeding is continued alongside complementary foods until an infant is 1 year of age (and there are benefits for continued breastfeeding in the second year of life and beyond). The only suitable alternative to breastmilk is a first infant formula. Breastmilk is an individually tailored source of nutrients and immune factors with a range of bio-active substances which support normal gastrointestinal, immunological and neurological development. Breastfeeding is therefore important for infant and young child health and development. The evidence substantiating the role of breastfeeding in influencing the microbiome, cognitive and immune function for infants and later health for mothers continues to increase (Victora et al, 2016). For more information on the importance of breastfeeding and current rates of breastfeeding in the UK see Appendix 3.

When the Healthy Start scheme was developed, it was suggested that it would be more equitable, and support breastfeeding, to offer food vouchers that breastfeeding mothers could spend on food for themselves. Families with an infant under 1 year of age receive two Healthy Start vouchers a week and these can be spent on infant formula or on fruit and vegetables or cows' milk for other family members. No other direct support for breastfeeding is provided by the Healthy Start scheme.

4.3.2 Introduction of complementary foods

Government policy across the UK recommends that complementary foods should be introduced to infants at around 6 months of age, alongside continued breastfeeding for the first year and after that for as long as the mother wishes to do so. This is based on WHO guidance (World Health Organization, 2003), and has been UK policy since 2003.

Public health guidance on introducing solids suggests that a range of foods including fruits and vegetables are offered, and that infants are introduced to a range of flavours and textures during the second six months of life alongside continued breastfeeding or a first infant formula. Appropriate infant nutrition is important so that infants can learn to chew and swallow a variety of textures and accept a range of tastes, as well as to add additional important nutrients to complement those from breastmilk (or infant formula), in particular iron (British Medical Association, 2013). Evidence suggests that poor diet quality in infancy is related to greater adiposity at early school age (Okubo et al, 2015) and there is evidence suggesting that early experience of a varied diet is likely to lead to more ready acceptance of a wide range of foods as children get older (Maier et al, 2007). A 'vegetables first' approach is thought to promote vegetable liking in infants (Barends et al, 2013; Fildes et al, 2015) and ensuring a wide range of vegetable foods is introduced in infancy is encouraged to support better nutrition in childhood. Where infants are breastfed in the second six months of life, the Healthy Start voucher can be spent on food for both the breastfeeding mother and the infant.

Information on eating well in the first year of life can be found in the report *Eating Well: The First Year*, available at

www.firststepsnutrition.org



4.4 The importance of good nutrition for young children

Young children are defined here as those between their first and fifth birthdays. Poor nutrition in early life has been shown to have significant and long-term consequences. Optimal nutritional intake – for example, in terms of iron and vitamin D, alongside the development of healthy eating and activity patterns - has been identified as key to building resilience and protecting against later chronic diseases (Chief Medical Officer, 2013). The fact that poor health is significantly socially patterned is well established (Scottish Government, 2008; Marmot et al, 2010). Within the UK, a child's risk of a wide range of negative health outcomes - such as mortality before the age of 1 year, low birth weight and not being breastfed – has been shown to be greater for children from less advantaged backgrounds, measured in terms of their family's income, social class and experience of multiple deprivation (Scottish Government, 2010).

In 2016-17 in the UK about a quarter of children in reception classes (4-5 years of age) were overweight or obese, with 9.6% of children obese (NHS Digital, 2018b). Obesity prevalence is greater among children living in more deprived areas (12.7% of children in reception classes in deprived areas compared with 5.8% in the least deprived), and there has been an increase in the gap between the obesity levels of children living in the most and least deprived in the period 2006 to 2016. Tooth decay, a largely preventable disease, also remains a serious problem. Findings from Public Health England's 2015 national dental epidemiology survey of 5 year old children showed that in 2015 in England, a quarter (25%)

of 5 year olds had experienced tooth decay, having on average three or four teeth affected, and that 41% of variation in oral health can be explained by deprivation (Public Health England, 2017a).

The diets of children in less affluent circumstances tend to be higher in energy-dense foods and lower in fruit and vegetables. In Scotland, 8% of children in the most deprived areas consumed only 0-1 different types of fruit a day, compared with 23% of children in the least deprived areas. The corresponding proportions who typically ate 0-1 different vegetables a day were 22% and 37% (Scottish Government, 2010). A study of 804 pre-school children suggested that poorer food choices characterised by foods high in fat, salt and sugar are associated with reduced scores in verbal and cognitive ability, after controlling for maternal intelligence, folic acid supplementation and alcohol use during pregnancy (Leventakou et al, 2016). It should be noted that it is difficult to control for all potential variables in dietary observational studies.

There are clearly multiple influences on childhood obesity, but diets high in energy-dense, processed food, excessive sugar intake (for example, in soft drinks), larger portion sizes and low levels of physical activity have major roles in the rising rates of childhood obesity (Goisis et al, 2016). Encouraging a higher intake of fruit and vegetables among young children in lower-income households is seen as a public health priority and in some areas an enhanced scheme to provide additional vouchers for fruit and vegetables to Healthy Start recipients with children has been trialled both to tackle food poverty and promote healthy diets. More details of the Rose Voucher scheme can be found at http://www. alexandrarose.org.uk/rose-vouchers

4.5 Vitamin supplementation recommendations for women planning a pregnancy, pregnant and breastfeeding women, and infants and young children

It is recognised that not all women and young children will have diets that provide adequate amounts of some important vitamins needed for development and good health, and recent evidence suggests that many people living in the UK require additional vitamin D, regardless of their diet. The idea of adding additional micronutrients to the diets of pregnant women and young children has been in existence since the start of the Welfare Food Scheme in 1940. The current recommendations for vitamin supplementation for pre-pregnancy, for pregnant and breastfeeding women, and for infants and young children in the UK are summarised in Table 6.

Table 6: Recommendations for vitamin supplementation in the UK

Pre-pregnancy, and pregnant and breastfeeding women			
Pre-pregnancy and during the first 12 weeks of pregnancy	Folic acid: 400 micrograms a day*		
Pregnant women	Vitamin D: 10 micrograms a day		
Breastfeeding women	Vitamin D: 10 micrograms a day		

The formulation of Healthy Start vitamins includes vitamin C as an additional nutrient for pregnant and breastfeeding women, even though we do not have specific recommendations for supplementation with this vitamin.

- * A higher dose of 5mg folic acid a day is recommended for women whose infants are at higher risk of neural tube defects and these include mothers who:
 - have a neural tube defect or have a family history of neural tube defects
 - have a partner who has a neural tube defect or has a family history of neural tube defects
 - have had a previous baby with a neural tube defect
 - have diabetes
 - are obese, or
 - take anti-epileptic medicine.

(National Institute for Health and Clinical Excellence, 2008)

Infants and children	
Breastfed infants from birth	Vitamin D: 8.5-10 micrograms a day
Formula-fed infants receiving less than 500ml formula a day	Vitamin D: 8.5-10 micrograms a day
Children aged 1-4 years**	Vitamin drops containing vitamins A, C and D

^{**} Up to a child's 5th birthday.

4.6 Why are vitamin supplements recommended for women planning a pregnancy, and for pregnant and breastfeeding women?

4.6.1 Folic acid

Folic acid is the name given to the synthetic form of the vitamin group folates. Folate deficiency results in impaired maturation of red blood cells and leads to megaloblastic anaemia. There is clear evidence that supplemental folic acid pre-conceptually and in the first 12 weeks of pregnancy can help prevent neural tube defects (NTDs) such as spina bifida, a serious birth defect which is responsible for some stillbirths, severe physical disability and many terminations (Scientific Advisory Committee on Nutrition, 2006). The crucial stage of neural tube development is in the first few weeks of an infant's development, and reaching women before they become pregnant to advise them on supplementation has been a public health goal under discussion (National Institute for Health and Clinical Excellence, 2008).

The Department of Health and Social Care and the National Institute for Health and Care Excellence (NICE) recommend a daily supplement of 400 micrograms of folic acid for all women who may become pregnant and until the 12th week of pregnancy (National Institute for Health and Clinical Excellence, 2017; Scientific Advisory Committee on Nutrition, 2011). Some women are at higher risk of an NTD-affected birth and are recommended to take a higher dose of 5mg a day (see Table 6 on page 50).

It is suggested that around half of all pregnancies in the UK are unplanned and this limits the usefulness of a recommendation for periconceptional folic acid supplements (from before conception to early pregnancy) in reducing the risk of NTD-affected births. In the last UK Infant Feeding Survey, which collected data in 2010, 37% of women said that they had taken folic acid prior to conception (McAndrew et al, 2012). Bestwick et al, in a survey among nearly half a million pregnant women carried out in 2011-12, found that fewer than one-third were

taking folic acid supplements before pregnancy (Bestwick et al, 2014). Only 6% of women aged under 20 years took supplements before pregnancy, compared with 40% of women aged between 35 and 39. Non-Caucasian women were less likely to take folic acid supplements before pregnancy than Caucasian women. The authors concluded that the policy is increasing health inequalities. Previous surveys have also found that younger and more socially deprived women are less likely to take folic acid supplements at the time of conception (Relton et al, 2005; Nelson et al, 2007; Haggerty et al, 2009). In the Scottish Maternal and Infant Nutrition Survey 2017, it was reported that 53% of women took folic acid before pregnancy and a further 37% took it when they found out they were pregnant. Only 9% of women overall reported that they did not take a folic acid supplement, but younger women and those in more deprived areas were less likely to take folic acid (Scottish Government, 2018a). Vitamins have been free for all pregnant women in Scotland since April 2017.

To prevent NTDs, folic acid supplements need to be taken before pregnancy; there is little to no benefit in taking folic acid supplements after pregnancy has been confirmed, as the neural tube (and any defect) will have formed by around eight weeks of pregnancy (Bestwick et al, 2014). Concerns have been raised due to the fact that women must be at least 10 weeks pregnant to be eligible to apply for Healthy Start vitamins, and the window of opportunity for folic acid supplementation has therefore passed by the time women can access the vitamins (McFadden et al, 2015; Jessiman et al, 2013; Filby et al, 2015). Even high-quality promotion campaigns that increase folic acid use have only resulted in under half of women in the target group taking supplements (Stockley and Lund, 2008).

NICE performed a cost-effectiveness review on the impact of providing universal Healthy Start vitamin supplements (National Institute for

Health and Care Excellence, 2015a) and reported that it would be cost-effective to extend the offering of Healthy Start supplements universally to all women who are planning a pregnancy and women less than 10 weeks pregnant. This is because folic acid reduces the risk of a large number of women having a pregnancy affected by a neural tube defect.

There remains no clear advice on whether women who are advised to take the higher dose of folic acid can also take Healthy Start vitamins and health professionals working to support Healthy Start would value a statement on this from the Scientific Advisory Committee on Nutrition (SACN).

The fortification of white flour with folic acid has been suggested as the most useful safety net to increase folic acid intake but, despite agreement across public health policy, this has not been introduced in the UK (Scientific Advisory Committee on Nutrition, 2017).

4.6.2 Vitamin D

Vitamin D is a fat-soluble pro-hormone. It is obtained through the action of sunlight on skin and from dietary sources. The action of sunlight on the skin converts 7-dehydrocholesterol to previtamin D3, which is then metabolised to cholecalciferol (vitamin D3). Dietary vitamin D exists as either ergocalciferol (vitamin D2) or cholecalciferol (vitamin D3).

Vitamin D is essential for the absorption of dietary calcium and phosphorus and the growth and development of the skeleton. Thus a deficiency in vitamin D can lead to bone deformities such as rickets during infancy and childhood, and bone pain such as osteomalacia among children and adults due to poor mineralisation of the skeleton (Scientific Advisory Committee on Nutrition, 2016). A 2001 survey of children under 5 years of age in the West Midlands, estimated the incidence of rickets in Caucasian children to be 0.4 per 100,000, compared with 38 per 100,000 in Asian children, and 95 per 100,000 in children of Black-African or Afro-Caribbean ethnicity (Callaghan et al, 2006). Vitamin D deficiency can also lead to heart failure due to severe hypocalcaemia

(Carlton-Conway et al, 2004). A Cochrane review of the impact of vitamin D supplements during pregnancy reported an improvement in women's vitamin D levels, and suggested that this may reduce the risk of delivering a baby prematurely, result in a lower risk of high blood pressure in women, and reduce the risk of a low-birthweight baby (De-Regil et al, 2016).

Sources of vitamin D

Vitamin D only occurs naturally in a limited number of foods, including oily fish (such as salmon, mackerel, herring and sardines), red meat and eggs. It is also added to some foods, such as fat spreads and breakfast cereals. The best source of vitamin D is summer sunlight on our skin. However, parents are also advised to protect their infants and children from exposure to the sun during the middle of the day - the time when it is possible to generate vitamin D in the skin. Sufficient vitamin D can be generated before the skin begins to redden, but it is not clear exactly how much time is needed in the sun to make enough vitamin D to meet the body's requirements. This is because there are a number of factors that affect how much vitamin D is generated, including skin colour, amount of skin exposed, and sun intensity. It is therefore difficult for parents to judge an appropriate length of time in the sun for their child. In the UK, sunlight does not contain enough UVB radiation in winter (October to March) for the skin to be able to make vitamin D. During these months, we rely on vitamin D stores, food sources (including fortified foods) and supplements (Scientific Advisory Committee on Nutrition, 2016).

Vitamin D status in the UK population

The National Diet and Nutrition Survey (2008-12) showed that 28% of women aged 19-24 years had plasma 25 hydroxy-vitamin D lower than the current accepted cut-off level for insufficiency of 25nmol/l, 13% for 25-34 years and 15% for 35-49 years (Bates et al, 2014). Data from UK-based cohort studies in pregnant women have reported mean or median serum 25(OH)D concentrations of 34-53nmol/l in summer and 26-34nmol/l in winter. The percentage with concentrations

of less than 25nmol/I ranged from 25-29% in the summer to 49-76% in the winter (Scientific Advisory Committee on Nutrition, 2016).

A high proportion of women are therefore likely to begin pregnancy with low vitamin D status (Javaid et al, 2006). It is well recognised that ethnic minority groups are particularly vulnerable to vitamin D deficiency (Datta et al, 2002; Scientific Advisory Committee on Nutrition, 2016). An analysis by ethnicity for the Health Survey for England showed that annualised mean serum 25(OH)D concentration was higher in white adults at 45.8nmol/l compared to Asian (20.5nmol/l) and black (27.7nmol/l) adults (National Centre for Social Research, 2011). It is clear that a high proportion of women have low vitamin D status, particularly in winter and at northerly latitudes in the UK (Scientific Advisory Committee on Nutrition, 2016).

Recommendations for vitamin D supplementation

A full review of the evidence on vitamin D and health can be found in the Scientific Advisory Committee on Nutrition (SACN) report on vitamin D (Scientific Advisory Committee on Nutrition, 2016). Responding to this publication, Public Health England made new recommendations that people at risk of having low vitamin D levels should take a daily 10 microgram supplement all year round, and that all adults (including pregnant and breastfeeding women) should consider taking a daily 10 microgram vitamin D supplement in the winter months. Breastfed babies and those receiving less than 500ml of infant formula a day were also recommended to be given a daily supplement of 8.5-10 micrograms of vitamin D (Public Health England, 2016).

For more information on vitamin D supplementation

In England

Vitamin D: Supplement Use in Specific Population Groups (PH56) (National Institute for Health and Care Excellence, 2017).

In Scotland

New Vitamin D Recommendation Information for New Parents. March 2017 (NHS Scotland, 2017a). Vitamin D Information for Health Professionals in Scotland (NHS Scotland, 2017b).

In Wales

Welsh Health Circular 043. New Advice on Vitamin D Intake (Welsh Government, 2016).

In Northern Ireland

New Advice on Vitamin D Intake. Letter from Department of Health, Northern Ireland. (Department of Health, Northern Ireland, 2017). https://www.health-ni.gov.uk/sites/default/files/publications/health/hss-md-05-2017.pdf

For infants

Statement on Vitamin D Supplementation for Breastfed Babies (Unicef UK Baby Friendly Initiative, 2017). https://www.unicef.org.uk/babyfriendly/wp-content/uploads/sites/2/2017/01/Vitamin-D-supplementation-for-breastfed-babies-Unicef-UK-Statement.pdf

4.6.3 Vitamin C

Vitamin C, or ascorbic acid, is essential for the development and repair of connective tissues and is therefore needed for healing wounds. It is also an antioxidant and helps the body absorb iron from non-haem sources. Vitamin C can be sourced from fruit and vegetables. There is evidence that low-income groups have lower intakes of fruit and vegetables (Scientific Advisory Committee on Nutrition, 2011).

Vitamin C status in the UK population

In the UK National Diet and Nutrition Survey 2008-2012, 3% of women had low plasma vitamin C (Bates et al, 2014). Families in lower-income groups tend to have less vitamin C in their diet than other groups (Scientific Advisory Committee on Nutrition, 2008). In the Low Income Diet and Nutrition Survey (LIDNS), 35% of women had plasma vitamin C concentrations in the depleted (less than 11µmol/l) or deficient (11-28µmol/l) range (Nelson et al, 2007).

In adults aged 19-64, vitamin C status was poorer in the LIDNS compared with findings from the general population, and a sixth of women in the LIDNS had plasma vitamin C concentrations below 11µmol/l, compared with 3% in the general population (Nelson et al, 2007).

The inclusion of vitamin C in the maternal Healthy Start vitamins is considered a prudent measure, but there is not a public health recommendation for pregnant and breastfeeding women to take vitamin C. Women could therefore take singular folic acid and vitamin D supplements and meet public health recommendations.

4.7 Why are vitamin supplements recommended for infants and young children?

The Healthy Start children's vitamin drops contain vitamins A, C and D. The rationale for these vitamins in the young child's diet is explained below.

4.7.1 Vitamin A

Vitamin A is a fat-soluble vitamin necessary for vision, immunity and integrity of epithelial cells. Carotene is a precursor found in orange and dark green vegetables. Natural sources of vitamin A include cheese, eggs, oily fish, milk, fortified fat spread and yoghurt.

It has been estimated that about 8% of children aged under 5 years in the UK do not have enough vitamin A in their diet (Scientific Advisory Committee on Nutrition, 2008).

It is possible to have an excess of fat-soluble vitamins, which can be harmful. Babies who have Healthy Start vitamins should not be given additional vitamin drops, nor cod liver oil as this also contains vitamins A and D. The Committee on Toxicity considered the possibility of oversupplementation with vitamin A in infants. They recommended a tolerable upper limit of 200 micrograms retinol equivalents per kg per day. The Committee concluded that there is potential for some infants to exceed the tolerable upper limit if they are:

- exclusively breastfed by mothers taking dietary supplements containing high levels of vitamin A
- fed with infant formula containing the maximum retinol content allowed by regulation
- given a high dose of vitamin A supplements, or
- consuming liver more than once a week.

The possibility of adverse effects from exceeding the tolerable upper limit in this way could not be excluded, but if they do occur, it is likely to be in only a very small proportion of infants (Committee on Toxicity, 2014). The Expert Reference Group convened by NICE on Healthy Start vitamins also concluded that, given the relatively low dosage in Healthy Start supplements, if infants did exceed the tolerable upper limit, it would only be by very small amounts (National Institute for Health and Care Excellence, 2015a).

The report of the Scientific Advisory Committee on Nutrition on Feeding in the First Year of Life (SACN, 2018) concluded that the UK infant diet provides ample vitamin A even with low intakes of supplements, and noted that infants who consume large amounts of fortified foods and supplements may exceed their tolerable upper limit.

4.7.2 Vitamin D

The current recommendation is that breastfed babies have a supplement of 8.5-10 micrograms of vitamin D from birth as a precautionary measure, although few products are licensed as suitable from birth. The vitamin D present in breastmilk depends on the mother's stores and current vitamin D levels, although a baby born with low levels will not restore their vitamin D from breastmilk alone unless their mother takes a very high daily dose (Hollis et al, 2015; NHS Scotland, 2017b).

Babies who are formula-fed do not require vitamin D if they are having 500ml/day of infant formula or more. Healthy Start vitamins are recommended for a baby who is mixed-fed (breastfed and formula-fed) and taking less than 500ml of formula a day.



Has the Healthy Start scheme met its goals?

his section summarises the currently available research evidence on whether Healthy Start has met its goals. In spite of the recommendations in the initial scoping review, there has been no robust evaluation of the impact of the scheme on nutritional or health outcomes. Large Government-funded qualitative studies of the Healthy Start scheme have indicated a range of experiences and have considered perceived outcomes. Additional information on aspects of the Healthy Start scheme is available from the Diet and Nutrition Survey of Infants and Young Children, and from smaller research projects and working groups.

5.1 What do we know about the impact of Healthy Start on maternal diet?

A 'before-and-after' study was conducted in Sheffield, investigating nutrition practices in pregnant and post-partum women and their infants before and after the introduction of Healthy Start. Dietary intakes of the two groups were assessed at 20 weeks of pregnancy and at each month during the first year of the baby's life. Data were collected by face-to-face, interviewer-administered, closed-question questionnaire interviews. The study included 163 Welfare Food Scheme (WFS) women and 149 Healthy Start (HS) women (Ford et al, 2009).

The initial research suggested that pregnant and post-partum women in receipt of Healthy Start food vouchers significantly increased dietary intakes of energy, iron, calcium, folate and vitamin C when compared with women in receipt of the Welfare Food Scheme benefits. Women in receipt of Healthy Start vouchers were more likely to meet the recommended nutrient intakes for iron, folate, calcium and vitamin C, and ate a greater number of portions of fruit and vegetables per day (approximately 5 more portions per week) compared with the women receiving Welfare Food Scheme benefits (Ford et al, 2009). This was sustained at least up to three months postpartum (Mouratidou et al, 2010). However, in both pregnant and post-partum groups receiving Healthy Start, a significant proportion of participants still did not meet the recommended intakes for iron and folate and to a lesser extent for calcium and vitamin C (Ford et al, 2009).

5.2 What do we know about the impact of Healthy Start on the diets of infants and young children?

The Diet and Nutrition Survey of Infants and Young Children (DNSIYC) included a sample of Healthy Start beneficiaries (Department of Health, 2013; Sommerville et al, 2013). The sample included a total of 580 beneficiaries with children aged between 4-18 months and four-day food diaries were used to estimate food and nutrient intakes

It was reported that 9% of children of Healthy Start voucher recipients aged 4-11 months and 4% of those aged 12-18 months consumed breastmilk during the study period. This was a smaller proportion than found in the general population surveyed, where 20% of infants at 4-9 months, 15% of those aged 10-11 months, and 8% of those aged 12-18 months consumed breastmilk. No children in the Healthy Start beneficiary group were reported to have been exclusively breastfed from birth. The types of infant formula consumed by infants in the Healthy Start sample were similar to those consumed in the UK sample, with 45% of infants consuming follow-on formula despite the fact that this type of formula cannot be bought with Healthy Start vouchers. In the last UK-wide Infant Feeding Survey, Healthy Start recipients had considerably lower rates of breastfeeding than the general population, with initial breastfeeding rates of 56%, compared to the UK average of 81% (McAndrew et al, 2012).

In the Healthy Start sub-sample of the DNSIYC, whole milk was included in the diet of 30% of children aged 4-11 months (mean consumption of 175g/day among consumers), and 73% of those aged 12-18 months (mean consumption of 356g/day among consumers). The intakes of cows' milk in the Healthy Start sample were higher in the younger age groups than for the main survey population, where there was a mean intake of 146g among consumers aged 4-11 months.

Despite the use of Healthy Start vouchers to buy fruit and vegetables, there was a statistically lower intake of fruit and vegetables among those in the Healthy Start sample of the survey compared to the UK sample overall. For children aged 4-11 months, this was 108g in the Healthy Start sample compared to 145g in the national sample, and for children aged 12-18 months 123g versus 170g.

Intakes of energy and other nutrients were not significantly different in the Healthy Start sample compared to the UK sample overall. Only small numbers of children gave blood samples and so comparative results have to be viewed with caution, but overall the proportion of children with lower serum ferritin, haemoglobin levels and 25-hydroxyvitamin D levels were similar in both samples.

5.3 What do we know about how Healthy Start vouchers are spent?

Some data on how vouchers are spent are available from the Infant Feeding Survey, the Diet and Nutrition Survey for Infants and Young Children, the Scottish Maternal and Infant Nutrition Survey, and findings from research studies (McFadden et al, 2014; Lucas et al, 2013; Ohly et al, 2017). However, there is limited information on how Healthy Start vouchers are actually used and to what extent the scheme acts to support women and children to acquire better nutrition at key stages of development.

The voucher reimbursement system does not have a facility to monitor what Healthy Start food vouchers are redeemed for. With the development of electronic card schemes proposed in Scotland and under consideration in England, there is a potential to improve data collection on this aspect of the scheme (Cockburn, 2016).

Data from the Diet and Nutrition Survey of Infants and Young Children (Department of Health, 2013; Sommerville et al, 2013) reported that 47% of Healthy Start recipients with children over 4 months of age spent all or most of their vouchers on infant formula (63% for recipients with children aged 4-11 months, and 29% for those with children aged 12-18 months). A guarter of recipients spent their vouchers only, or mainly, on fruits and vegetables, increasing with age of child from 18% for children aged 4-11 months to 34% for those aged 12-18 months. A small proportion of households spent their vouchers only or mainly on cows' milk (9% overall), or on combinations of fruit and vegetables and infant formula or cows' milk. The report also indicated that 3% of the eligible sample households received Healthy Start vouchers, but did not spend them.

In 2010, the last of the UK-wide quinquennial Infant Feeding Surveys (IFS) included a purposive sample of women who would be eligible for Healthy Start and included questions regarding their infant feeding practices (McAndrew et al, 2012). The IFS data are limited, as they only include women who have an infant under the age of 9-10 months (excluding Healthy Start eligible pregnant women without children or eligible women with a child over this age, but under the age of 4). Among this group, Healthy Start vouchers were primarily spent on infant formula.

Ohly et al conducted a realist review to explore how low-income pregnant women use Healthy Start food vouchers, and the potential impacts of the programme (Ohly et al, 2017). The review included 38 primary studies: four UK studies on Healthy Start, and 34 US studies on WIC (the Special Supplemental Nutrition Program for Women, Infants, and Children). The findings suggest that some low-income pregnant women may use Healthy Start vouchers to increase their consumption of fruits and vegetables and plain cows' milk, whereas others may use them to reduce food expenditure and save money for

other things (Ohly et al, 2017). In a qualitative study to examine how young pregnant women used Healthy Start vouchers, Ohly et al (2018) reported that some pregnant women use their Healthy Start vouchers to stockpile infant formula before the birth of their baby and that many young women do not have sufficient resources, even with the vouchers, to afford healthy food for themselves and their children. In this study, parents prioritised the children over their own diet and potential benefits for the unborn baby.

A review by Griffith et al reported that spending on fruit and vegetables increased by 15%, or roughly two-thirds of a portion per day per household in receipt of Healthy Start vouchers (Griffith et al, 2015). Many women said they would buy similar amounts of milk and vegetables and fruit even if they did not get the vouchers, but the vouchers helped them to manage better financially. The vouchers were also said to help to establish good habits and supported parents to explore different and better ways of feeding their families. The vouchers provided a reminder of the need to eat a healthy diet. Several pregnant teenagers and young mothers said that Healthy Start provided them with resources for food to which they would not otherwise have access. Many of the women, especially those who had come to the UK as migrants, expressed a great sense of gratitude for the scheme.

The Scottish Maternal and Infant Nutrition Survey reported that the vast majority of antenatal respondents (97%) and postnatal respondents (93%) who had received Healthy Start vouchers had used them (Scottish Government, 2018a). Among antenatal respondents, the majority used their vouchers to buy cows' milk (80%), fruit (88%) or vegetables (74%). More than a quarter of antenatal respondents reported using the vouchers to buy infant formula (stockpiling the voucher or formula before the birth). Among postnatal responders, 65% and 66% of respondents used vouchers to buy fruit and vegetables respectively, but 83% reported using the vouchers to buy infant formula. Again, there are no data on how the vouchers were used in families with children older than about 10 months.

5.4 What do we know about where Healthy Start vouchers are spent?

The Department of Health commissioned independent market research in England to understand the Healthy Start scheme better from the perspective of the retailers involved (Department of Health, 2012). The aims of the research were to explore the views of staff who accepted the vouchers, and to understand more about voucher misuse, including retailers' perspectives on why this might happen, their views on beneficiaries' understanding of how to use vouchers, and what more could be done to prevent misuse and mistakes. A range of locations across England and different types of retailer was included, but the sample size was only 79 in total.

The research found that the scheme was working well overall, with benefits to both Healthy Start families and retailers evident. Misuse of vouchers appeared rare, the retailers found the scheme straightforward to follow, and recipients wanted to get the maximum value from the vouchers for their family.

In a qualitative study of parents using Healthy Start, interviews were conducted with 107 parents from 13 areas in England (Lucas et al, 2013). Parents in this study reduced stigma by using self-service tills and by only visiting retailers known to accept the vouchers.

In some more deprived areas it has been reported that there are no fruit and vegetable retailers registered with Healthy Start. This indicates that low-income families in receipt of Healthy Start vouchers may struggle to use them to buy fruit and vegetables (Nzuza and Duval, 2016).

5.5 What do recipients of Healthy Start think about the scheme?

McFadden et al looked at how the Healthy Start scheme works from the point of view of women using it (McFadden et al, 2014). They were commissioned by the Department of Health to provide evidence for how the scheme could work better. Some 113 people who were eligible for Healthy Start or might be eligible took part in focus groups, workshops and interviews. In addition, 725 practitioners, service managers, commissioners, policy-makers and advocacy groups were consulted on their experience and views.

The women consulted said that Healthy Start was an important support for healthier eating. Most reported that the scheme influenced their shopping and eating habits. They could buy a greater variety of vegetables and fruit, and could experiment with introducing new fruit or vegetables to their children. However, the value of the vouchers was being eroded by the rising cost of food. Some women also said that the Healthy Start vouchers:

- reminded them it was important to eat a healthy diet
- helped them to manage better financially or buy better quality, but they would buy fruit, vegetables and milk anyway
- meant that they (especially younger women) could afford fruit and vegetables, which they would not otherwise have eaten.

"I used to live on junk food – now I'm eating healthy. I get up feeling great – Friends say I look much better now – makes me feel so much better and healthier. Without vouchers I wouldn't buy fruit and veg."

Overall, the study indicated that Healthy Start met its aim to be a nutritional safety net for low-income families by providing a small amount of regular financial support for the purchase of fruit, vegetables, cows' milk and infant formula (McFadden et al, 2014).

Lucas et al (2015) collected data in a qualitative survey of 107 parents using Healthy Start vouchers in 13 areas in England. In this study, three-quarters of recipients were signposted to the scheme by health professionals and forms were typically distributed and signed at antenatal visits. Those without fluency in written English needed support to complete the form. The survey also reported that the need for a health professional's signature was a barrier to those who did not regularly access healthcare. While many parents said their claim was processed swiftly, where problems were experienced and the reasons for delay or rejection were not understood, parents felt 'frazzled' by the experience and found phoning the helpline to resolve issues was expensive, particularly if using a mobile phone. This survey also reported some confusion about the need to call the Healthy Start Issuing Unit on the birth of their baby, with some parents not able to recall this advice and some going for lengthy periods without vouchers when the vouchers stopped after the birth. The study also reported particular problems for women who are likely to be eligible but had disrupted lives, particularly relating to homelessness. Parents in this study reported the food vouchers made a big difference to their food budget: "a big relief", "making a big difference".

Many parents did not recall useful dietary information ever coming with their vouchers, and some of those who did recall it felt it was not helpful.

"I just wish with Healthy Start there was a bit more advice about what to cook and how to cook it and recipes cos that would help but it's got to be down to earth like I say, not chickpea pie! That might work for middle class people and things like that but they're not middle class people getting the tokens." (Mother in receipt of vouchers, with four children aged 16, 4 and 2 years, and 7 months.)

Families in this study spent between £30 and £50 a week on food, and the Healthy Start vouchers represented a considerable additional weekly allowance. Fruit and infant formula were highlighted by parents as expensive food items.

In 2016, the Department of Health undertook some work on Healthy Start as part of their digitisation project (Cockburn, 2016). The initial piece of work included interviews with 19 mothers across the country and 11 health professionals including midwives and health visitors. The insight gained from this new research was triangulated with findings from existing academic research into Healthy Start and data from the Healthy Start Issuing Unit. The following key insights were reported:

- Users valued the Healthy Start scheme. The scheme has a positive impact on the diets of users and their families. Many users rely on the financial support the scheme gives.
- Users wanted control over how they use their Healthy Start benefit. Users often lose part of the value of their voucher because no change can be given. The voucher expiry date can also lead to users losing part of their benefit value.
- Users want a reliable and stress-free interaction with retailers. Users naturally want to avoid hassle and embarrassment in-store. They want all staff in all branches of supermarkets to understand the scheme, but this is not always the case currently. A wider range of retailers, including online retailers, would be helpful.
- Users experience issues with the paper vouchers and most are ready for some kind of digital solution. Paper vouchers have a number of drawbacks for users – such as children damaging them and the inability to spend smaller amounts – which could be solved by digital technology.

This was a small sample of users and therefore some caution has to be taken with the findings, but this information is being used to progress the idea of digitising the Healthy Start voucher scheme. The authors also reported that in this small study, although all those interviewed had smartphones, they often had limited or no credit. It was reported that users sometimes felt uncomfortable installing apps or using the phone for transactional purposes and the authors suggested that there could be a number of

barriers to internet access and use – for example, among those with disabilities, low literacy levels, or English as an additional language, or among people leading chaotic lifestyles.

5.6 What do health professionals think about Healthy Start?

In an evaluation by McFadden et al (2014), health professionals reported that the scheme had important benefits for the health of mothers and children. These were:

- increasing vitamin intake, and
- enabling low-income families to include fruit and vegetables in their diets.

Some health professionals in the study thought there were also negative aspects to the scheme, including the following:

- There could be stigma attached to using vouchers that are only for those on low incomes.
- Many families in nutritional need are not eligible for the scheme (for example, those on low incomes but above the income threshold, and those seeking asylum).
- It could create the erroneous impression that families who are not eligible for Healthy Start do not need vitamin supplements.
- It could be an incentive to formula-feed.

Professionals reported that barriers to registration included complex eligibility criteria, health workers not targeting the right families, and a general low level of awareness among families. Access to the scheme was particularly challenging for women who did not speak English, had low literacy levels, were in low-paid work, or had fluctuating incomes. The potential impact was undermined by the rising price of food relative to voucher value. Access to registered retailers was problematic in rural areas, and there was low registration among smaller shops and market stalls, especially those serving culturally diverse communities (McFadden et al, 2014).

Healthy Start coordinators and frontline health and children's professionals were reported to have limited or no data on the impact of the scheme on families, and many of them thought the scheme had a limited impact in terms of influencing the diets of low-income families (Lucas et al, 2013). It has also been reported that there is some concern among health professionals over infant formula being made available through the Healthy Start scheme. Some health professionals believe that including infant formula under a Healthy Start umbrella suggests that it is a healthy option, and that the scheme incentivises the use of infant formula. Others argue that low-income families should have access to resources to feed their children and the voucher value should cover the whole cost of infant formula where mothers are not breastfeeding (McFadden et al, 2014).

In the work carried out by the digital team at the Department of Health in 2016, the following insights were reported from interviews with health professionals (Cockburn, 2016):

- Awareness of Healthy Start relied too heavily on busy health professionals and word of mouth. Most users reported being made aware of the scheme by midwives and health visitors. However, it is easy to see how Healthy Start could be overlooked in conversations between health professionals and their clients. Contact time is tight and women report being overwhelmed with information during visits. Furthermore, a lack of consistency in approach across areas means that some women are being missed out, often in more affluent areas where receiving benefits is less common overall and assumptions may be being made about users' eligibility.
- The requirement for a health professional to sign the form adds unnecessary delay to the application process. The need for a health professional's signature has been widely cited by users and health professionals as a barrier to applying, and a key reason why users experience a delay in receiving the benefit. Users and health professionals agree there is no clear health value in the interaction necessary for completing the form.

5.7 What are the barriers that reduce the effectiveness of the Healthy Start scheme?

5.7.1 Barriers identified by families and professionals

A seminar convened in 2015 by the Child Poverty Action Group in Scotland collated the following issues from families and professionals involved in the Healthy Start scheme, which mirror those raised by research studies (Child Poverty Action Group in Scotland, 2015).

Stigma

It was suggested that use of vouchers could be stigmatising, marking the individual out as being on a low income. It was felt that this was a particular barrier for women in small rural communities where everyone knows one another. One participant noted that the existence of stigma was illustrated by recent research showing that women preferred to use vouchers in supermarkets with automated checkouts. Stigma as a barrier to application and use of vouchers was also raised by health professionals consulted as part of the review of the distribution of Healthy Start vitamins through community pharmacies carried out in Scotland (Scottish Government, 2015).

Complexity of process for application and receipt

Many participants felt that the process of applying for Healthy Start could be simplified and made more user-friendly. Complex administrative processes were seen by many as creating unnecessary barriers for vulnerable families.

Even if the Healthy Start application is sent in on time, there may be a delay of up to four weeks in sending out the vitamin coupons, so that, for example, the woman may not receive folic acid supplements in the first 14 weeks of their pregnancy.

It is only possible to apply in English. NHS guidelines state that their own forms should be available in six languages and it would seem sensible for this also to be the case for Healthy Start application forms. The form must be completed in black ink and the letters and numbers must be contained within the boxes in the form. Frontline workers also recounted having to apply on several occasions due to forms going missing. It was reported that some people are so dejected by the rejection of their application form - for example, if it is sent in too early, in the wrong colour ink, or with a postcode missing - that they do not bother to apply again. The form was seen as overly complex and difficult, particularly for those whose first language is not English. This is reflected in the data from the Healthy Start Issuing Unit that around 30% of applications received are rejected, most of these for errors in completing the form rather than because the applicant is not eligible.

Confirmation of the birth of the baby

Another seemingly unnecessary barrier to accessing Healthy Start identified was the requirement to inform the Healthy Start Issuing Unit once the child has been born. Participants questioned why eligibility could not continue automatically given that the vast majority of pregnancies result in successful births.

The difficulty of claiming Healthy Start for the first time after the birth of the child was also highlighted. It was felt that a health professional's signature was more difficult to obtain post-partum.

Difficulty of using vouchers in rural areas

It was reported that it can be difficult to use vouchers in rural areas, particularly if none of the local shops are registered to accept them.

Lack of awareness among hard-to-reach families

Several participants also highlighted the need for the NHS (or another body) to do more to raise awareness of Healthy Start among traditionally hard-to-reach women.

Including more vulnerable women in the scheme

Participants suggested that entitlement should be extended to include all pregnant women in full-time education and all young pregnant women up to the age of 20. This was seen as a way of overcoming the barriers currently faced by vulnerable, low-income women who may not be in receipt of means-tested benefits.

Complexity of arrangements

The complexity of the Healthy Start benefit arrangements, and the transition arrangements within the scheme for when the child is born, are easily misunderstood by both users and health professionals, sometimes leading to delays in receiving benefit, or unexpected stoppages.

Digitisation of Healthy Start

In November 2017 the Department of Health awarded an 8-week contract worth £80,000-£90,000 to a small business to provide a digital Healthy Start card and payment system for beneficiaries, using a pre-paid card to use across multiple retailers which would be topped up every four weeks. (The contract was for the Alpha phase.) (Gov.UK Digital Marketplace, 2017.) The Department of Health and Social Care is now undertaking a wider pilot, in a range of urban and rural locations, of a digital Healthy Start card which can be used with a range of retailers. This would enable recipients to make use of the full value of their vouchers, as change could be stored on the card. It may also reduce stigma associated with the scheme, as it would be less obvious.

The Scottish Government is also proposing a card-based system. An online application system has been suggested, in line with other benefits. This would mean the removal of the requirement for a health professional to sign the form and therefore require an amendment to the legislation (Personal communication, Rebecca Sidwell, March 2018).

5.7.2 Awareness of the Healthy Start scheme and perceptions of eligibility

There is little information available about how many women may feel they are eligible for the Healthy Start scheme compared to those who are beneficiaries. In the Scottish Maternal and Infant Survey, 15% of antenatal respondents thought they qualified for the benefit, but only 5% received it, and among those with infants aged 8-12 months, 13% thought they were eligible and only 6% received vouchers. Another 3% of women antenatally and 2% of women postnatally had applied but were yet to receive vouchers. About 7% of women in both samples did not know if they were eligible. Among women who did not know about the scheme, 7% of those antenatally and 9% postnatally thought they qualified. Younger mothers were more likely to think they qualified for the scheme and were more likely to be in receipt of the benefit. Among pregnant women aged 20-24 years of age, 33% thought they qualified for the scheme but only 9% were beneficiaries, compared with only 7% of those over the age of 35 years who thought they were eligible where only 3% were beneficiaries. Women were also more likely to think they qualified for the vouchers if they lived in a more deprived area, and 10% of women antenatally and 26% postnatally in the most deprived areas were beneficiaries compared to 1% antenatally and postnatally in the least deprived area.

5.7.3 Barriers to access to Healthy Start vitamins

There have been problems with access to the Healthy Start vitamins, as parents may not know where to go to collect them and may not be motivated to go out of their way to receive vitamins which they are not convinced that they need.

An initiative to improve access to vitamins in Scotland in 2015 found that distribution varied widely between health boards. Using community pharmacies did increase distribution of Healthy Start vitamins, but uptake in Scotland continued to be low. Healthy Start leads and community pharmacies both said that intended recipients might not be aware of the vitamin scheme or why it was important. Healthy Start leads commented that the amount of information provided at the booking appointment can overwhelm women, and information on the Healthy Start scheme can be easily lost. Unfortunately, the views of Healthy Start recipients were not collected (Scottish Government, 2015).

A community pharmacist in Glasgow said:

"The demand from patients has been sporadic and as a result, we have had some stock go out of date. This resulted in us keeping a low stock, which occasionally meant we ran out when patients required them."

The universal approach was supported by health professionals because it is less likely to stigmatise recipients (Moonan et al, 2012). The authors concluded that a universal approach may reduce some of the administrative hurdles confronted by the Healthy Start vitamin scheme.

Universal free provision of Healthy Start vitamins can improve uptake, but without wider action the impact may be limited. One study showed a year-on-year increase in uptake to 23% for women's vitamin tablets and 20% for children's vitamin drops when universal free supplementation was supported by action to increase awareness (McGee and Shaw, 2013).

Variation between areas also suggests that action can be taken to improve uptake.

In 2013, the Chief Medical Officer in England reported:

"There is a growing body of evidence to suggest that providing free vitamins to targeted groups has not led to high enough levels of uptake. This in turn has therefore not impacted on reducing the morbidity associated with vitamin deficiency." (Chief Medical Officer, 2013).

This led to the NICE cost-effectiveness review, which considered whether moving from a targeted to a universal scheme would be cost-effective. The systematic review carried out for NICE identified key barriers to uptake of the vitamins as:

"practical difficulties with obtaining supplies of the vitamins, their short shelf-life, the complex ordering and reimbursement system, complicated assessment of eligibility and difficulties in identifying a convenient and accessible location through which they could be distributed."

The majority of the evidence identified in the review investigated vitamin D supplementation in pregnant women, women in the first year postnatally, and children up to the age of 4 or 5 years, and the results from these studies were inconclusive. Of the seven studies identified, three found vitamin D supplementation to be costsaving and four found it to be cost-incurring. Six of the seven studies were quality-appraised as having very serious limitations. It was therefore determined that it was not possible to draw definitive conclusions about whether vitamin D supplementation in the population groups under consideration is, or is not, cost-effective (National Institute for Health and Care Excellence, 2015a).

5.8 What can people buy with a £3.10 voucher?

The current Healthy Start food voucher value of £3.10 per week for pregnant women and children aged 1-4 years and £6.20 for an infant in the first year aims to improve the intake of fruit, vegetables and cows' milk in order to provide important additional energy and nutrients to the diet.

In 2018, it was estimated that it costs between £8.37 and £13.52 a week to feed a 2-3 month old baby on one of the five most easily accessible brands of formula (which have about 95% of the infant formula market in the UK). The cost of an 800g/900g tin of infant formula for these brands is between £8.50 and £12.99, so three to five Healthy Start vouchers would be needed to buy one week's supply (First Steps Nutrition Trust, 2018). Currently, babies under the age of 1 year get two vouchers a week, worth a total of £6.20. Table 7 illustrates why the weekly voucher value is insufficient to pay for infant formula for infants who are not being breastfed at about 2-3 months of age.

Table 7: Number of Healthy Start food vouchers needed to buy one week's supply of infant formula for a 2-3 month old

One week's supply of infant formula for a 2-3 month old (equivalent to 6,440mls)*	Cow & Gate First Milk	Hipp Combiotic First Milk	SMA Pro First Milk	Aptamil First Milk	Aptamil Profutura First Milk
Cost per week	£8.37	£9.66	£10.30	£11.60	£13.52
Cost for tin or packet as purchased	£9.00/900g	£8.50/800g	£10.00/800g	£11.00/800g	£12.99/800g
Number of Healthy Start vouchers needed to buy one week's supply for a 2-3 month old	3	4	4	4	5

Prices correct as of July 2018. All data are from Costs of Infant Milks in the UK, available at www.firststepsnutrition.org. Amounts of milk needed are based on scoop weights of powder used to reconstitute formula, so products cannot be compared directly by cost/100g purchased powder.

Two cheaper brands of infant formula are available which, in July 2018, are marketed at £7.00 for 900g (Mamia in some Aldi Stores and Sainsbury's Little Ones in some Sainsbury's stores) and using these milks would cost families about £6.44 per week to feed a 2-3 month old baby. However, these milks may not be accessible to all families in the UK.

The high cost of infant formula in the UK is partly related to the amount spent on marketing and advertising products. First Steps Nutrition Trust supports stronger regulations on the marketing of breastmilk substitutes.

In Table 8 we have considered the weekly cost of providing 300ml of cows' milk (about half a pint) per day for women and children and a range of

fruit and vegetables (five 80g portions per day for women and five 40q portions for 1-4 year olds). Costs are based on Tesco food prices accessed in July 2018 and allow for any waste involved in the preparation of the fruit or vegetable before consumption. For this exercise we have suggested a typical package of commonly available fruits (apple and banana) and vegetables (carrots, tomatoes and broccoli) using the cheapest items available and have based the milk cost on purchase of 4 pints of own-brand semi-skimmed milk. These would be the potential costs if families can access a large supermarket and have facilities to store fresh food. Buying smaller portions or individual fruits for example would be significantly more expensive.

Table 8: Typical costs of a daily package of five fruits and vegetables and 300ml of semi-skimmed milk for a woman or a 1-3 year old child

Commodity*	Cost per week for a pregnant woman (300ml milk/day and 80g/day of five different fruit and vegetables)	Cost per week for a 1-3 year old** (300ml milk/day and 40g/day of five different fruit and vegetables)
Eating apple	£1.17	58p
Banana	64p	32p
Carrot	35p	18p
Tomato	£1.08	54p
Broccoli	£1.33	66p
Semi-skimmed milk	£1.00	£1.00
Total	£5.57	£3.28

^{*} Costs are for fruits and vegetable as consumed, based on food costs on the Tesco website in July 2018, using the cheapest options available.

The costs in Table 8 are likely to be significantly lower than might be the case if foods are purchased from the smaller neighbourhood shops that many Healthy Start recipients may rely on. Frozen fruit and vegetables can be cheaper, but require a freezer for storage, and fruits and vegetables purchased from local fruit and vegetable markets and box schemes can be more cost-effective, but may not be available to many Healthy Start recipients. While we acknowledge that the Healthy Start scheme does not suggest it will provide all the fruit and vegetables recommended for one week, the value of the voucher should be reviewed in light of actual food costs for pregnant women, infants and young children.

^{**} For simplicity, costs are based on semi-skimmed milk but children under 2 years of age are recommended to have full-fat milk as their main milk drink, moving to semi-skimmed milk after 2 years of age if they are good eaters.



What has been shown to improve uptake of Healthy Start in the UK?

This section describes some initiatives that have been undertaken to increase the uptake of Healthy Start.

6.1 Work with health professionals in Leith, Scotland

A project in Leith, Scotland, looked at midwives' and mothers' experiences and views of Healthy Start, and how training midwives and providing welfare rights support could enable an increased uptake of Healthy Start over the short term (MacKenzie and Dougall, 2016). A parent support worker helped families to call the Healthy Start Issuing Unit once the baby was born (to prevent a hiatus in delivery of vouchers), and shared with local midwives information about the need to do this, so they could pass that information on to more women.

The project demonstrated that low-income women and families struggle to apply for Healthy Start without coordinated support, and are vulnerable to even small rule changes in the welfare system.

Factors that improved uptake included:

- speaking to midwifery teams rather than relying on e-mails
- recognising that women may need help to complete application forms, and
- employing welfare advice workers.

There was an increase in the number of women receiving Healthy Start food vouchers and vitamin coupons for Lothian overall (13.3% increase), at a time when voucher receipt fell for the rest of the country (8.4% decrease).

Success relied on understanding the application and administration process, testing improvements, sharing team and small area data, and employing welfare rights advisers. The benefits of this project extended beyond the Healthy Start programme and it was reported that families attending a session with a welfare rights adviser increased their family budgets by an average of £4,500 a year. The benefits, tax credits, and other forms of support are currently UK-wide so there are lessons here for early years workers and families interacting with welfare systems.

6.2 Improving uptake of Healthy Start in Halton, Cheshire

In Halton Borough Council (which covers the areas of Daresbury, Hale, Moore, Preston Brook, Runcorn and Widnes in Cheshire) there is a focus on ensuring that women and children receive the Healthy Start vitamins and vouchers they are entitled to. The Early Years Forum brings together public health, including Health Improvement, Children's Services, midwifery, health visitors, the infant feeding lead and children's centre manager representatives. This multidisciplinary group is responsible for coordinating plans to promote Healthy Start, among other issues. From 2015 there has been part-universal access to Healthy Start vitamins: all pregnant and breastfeeding women receive free vitamins via their midwife and each child receives one bottle of vitamin drops before 6 months of age.

A social marketing plan was run to enhance awareness of Healthy Start prior to the transfer of responsibility for children's public health to the borough council in 2015. Healthy Start was advertised to midwives and health visitors, in community centres where there were antenatal clinics, and in children's centres. Social media, pop-ups, leaflets and posters have all been used to raise awareness of the scheme.

The uptake of the vouchers in April – May 2018 was 83% compared to the average rate in England of 66%. However, a decline in uptake of Healthy Start was noticed when Universal Credit was introduced.

Success in improving uptake has been reported to be due to better working of staff across different teams and providing help with form filling for potential beneficiaries.

6.3 Promotion work in Greenwich, London

In Greenwich, responsibility for Healthy Start sits within the Health Improvement and Determinants of Health division of Public Health and therefore has been linked closely with the childhood obesity and food poverty agendas. The programme to promote Healthy Start is coordinated centrally by the Public Health team, which also takes responsibility for providing midwifery and children's centres with their Healthy Start vitamin supplies. Public Health works closely with the health visiting service who promote Healthy Start in their health visitor advice sessions and signpost eligible families to children's centres for vitamins and further support.

The promotion and provision of Healthy Start vitamins are included in the service specifications for Health Visiting and Midwifery Services. They are also identified as a key performance indicator for all Greenwich children's centres.

The establishment of a multi-agency steering group which oversees the implementation of an annual Improvement Plan has helped to coordinate activities centrally and improve communication between partner organisations. Also, the implementation of the midwifery scheme has led to an increase in the number of early self-referrals to Healthy Start among pregnant women, which has meant that eligible families also start to benefit from the food vouchers aspect of the Healthy Start scheme sooner.

6.4 Training for professionals, and making Healthy Start more accessible, in Redcar and Cleveland

Healthy Start uptake rates are consistently high in Redcar and Cleveland following a publicity campaign across the whole Tees area. The Director of Public Health put this down largely to the enthusiasm of one member of staff, who provided training for midwives and health visitors as well as children's centre staff.

Public Health also funded a universally accessible Healthy Start vitamins scheme for all pregnant women and children up to the age of 4, and redesigned the pathway for provision. Midwives and health visitors gave out vouchers at first contact visits, and subsequently the vitamins were collected from a local pharmacy.

6.5 Promoting universal vitamin uptake in Birmingham

A 2001 survey of children under 5 years of age in the West Midlands, estimated the incidence of rickets in Caucasian children to be 0.4 per 100,000 compared with 38 per 100,000 in Asian children and 95 per 100,000 in children of Black-African or Afro-Caribbean ethnicity (Callaghan et al, 2006).

The Heart of Birmingham Primary Care Trust population is 75% non-white, so the majority of the population is at higher risk for vitamin D deficiency. A steering group comprised of community paediatricians and representatives from midwifery, health visiting, public health and dietetics developed a policy to address this and to plan a campaign in 2004. The campaign started in 2006 with free vitamin D supplements offered to all women from the start of pregnancy until their child was 12 months old, and to all children under five years old.

Media coverage was organised, with bus advertisements as well as a campaign with shopkeepers. The leaflets were available in multiple community languages. Success relied on high levels of knowledge among NHS staff and consistent promotion to the public. Access to the supplements needed to be easy and public understanding of the need for vitamin D sufficient to maintain uptake.

Health professionals advised women to collect the vitamins when their pregnancy was confirmed and gave the children's vitamin drops out at the first home visit. Parents could then request further supplements for their child or themselves from their local health centre, a children's centre or pharmacy.

Barriers to success of the scheme identified were:

- reception staff acting as 'gatekeepers', and sometimes trying to ration the vitamins
- clinical staff, particularly midwives, having large caseloads and other priorities
- midwives not having vitamins in the consultation rooms and having to signpost clients to reception
- Department of Health supplies at times being erratic
- the public not feeling vitamin D deficient.

In the year to March 2009, 11% of women were receiving Healthy Start vitamins, and 13% of children. Uptake of women's vitamins increased, reaching at least 17% of women in 2010-11, but the number of children receiving vitamins slightly fell to 12% of children. However, it is unclear whether women and children continue taking their vitamins, or mainly just use one bottle.

The incidence of symptomatic vitamin D deficiency in children younger than 5 years more than halved (from 120/100,000 in 2006 to 49/100,000 in 2010) following the introduction of the universal free vitamin supplements (Moy et al, 2012). The policy was extended to the wider Birmingham area.

The budget was £113,000 per year, which would not be adequate if there was 100% uptake of the vitamins. An improved process to claim the cost of Healthy Start vitamins for eligible families from the Department of Health was highlighted. Since the scheme was initiated, the equivalent level of publicity has not been maintained and on-going user engagement in Birmingham is unknown.

Birmingham City Council

Birmingham City Council and their public health team have set up an action plan to increase the number of families registering for and using Healthy Start vouchers and the number of outlets registered to receive them. They have been proactive in promoting the Healthy Start scheme by working with retailers. A case study looking at the work of this team can be found in the Sustainable Food Cities' Veg Cities handbook at http://sustainablefoodcities.org/Portals/4/Documents/VegCities_Handbook15_05_2018.pdf

6.6 The draft London Food Strategy

The Draft London Food Strategy includes a commitment from the Mayor to increase the uptake of Healthy Start vouchers across London so that 80% of those eligible receive the vouchers (Mayor of London, 2018). The draft strategy reported that increasing uptake could boost London's healthy food economy by £2.5 million a year and improve the nutritional health of pregnant women and new families on low incomes. Whilst this remains at the time of writing a recommendation in a draft report rather than a strategy which has proven success, the setting of targets to promote the importance of local uptake of Healthy Start in city-wide food policies is a model to be encouraged.

Conclusion

From this review of the Healthy Start scheme it appears that, whilst the scheme was set up with good intentions to improve the nutritional status of pregnant women, infants and children in vulnerable and low-income families, a lack of focus on numbers of families eligible for and entitled to the scheme from 2013 to 2018 means it is failing to deliver on its objectives. The scheme has not been consistently supported either nationally or locally, and changes to the benefits system do not appear to have been reviewed in terms of their impact on the increasing number of families who are food insecure.

We have made a series of recommendations for how we believe the Healthy Start scheme could be improved to make it meet its original intentions and to make it fit for purpose in the current climate of austerity and increasing family food poverty. See page 7.

We welcome the consultation document from Scotland which has made some bold suggestions for increasing eligibility to a new welfare food scheme linked in with other benefits for low-income families, as well as recommendations to increase the value of the food vouchers and the range of foods that can be bought. We hope that the consultation planned by the Department of Health and Social Care will consider the recommendations made both in the Scottish review and in this report.

APPENDIX

The development of Healthy Start from the Welfare Food Scheme

Evidence of the need for a revised welfare food scheme

The Acheson Review in 1998 drew attention to income as one of the major determinants of health (and nutrition) inequalities, and highlighted the importance of nutrition for women of childbearing age and their children (Acheson, 1998).

The Welfare Food Scheme was originally introduced as a universal measure in 1940 during the Second World War, to ensure that pregnant women and young children received milk during times of shortage and rationing. A quote from the Ministry of Health provides practical justification of why subsidising milk as a welfare food was important:

"... to ensure that the rise in the price of milk made necessary by the increased cost of production and distribution does not affect those classes of the community whose need for milk is greatest."

(Ministry of Health, 1955.)

Cod liver oil, containing vitamins A and D, and concentrated orange juice, as a source of vitamin C, were also provided for young children. Because the scheme was generally credited with improving the health of children during the war years, the relevant regulations were never repealed, although infant vitamin drops (and maternal tablets) replaced cod liver oil and orange juice in 1975, and commercial formula milk replaced National Dried Milk in 1977 (Ainsworth, 2014). During the 1950s, eligibility for the Welfare Food Scheme was narrowed and by 1979 was only available for families on a low income (Machell, 2014).

For decades, therefore, the Welfare Food Scheme provided low-income families with tokens that they could exchange for milk for their children under 5 years of age. The value of a voucher

during the Welfare Food Scheme depended on the price of milk, as each voucher was exchangeable for 7 pints of cows' milk (or a 900g tin of infant formula). In 2006, the price of a pint of cows' milk was approximately 40p, so 7 pints was equal to approximately £2.80.

The Committee on Nutritional Aspects of Food and Nutrition Policy (COMA), which was commissioned to review the Welfare Food Scheme in 1999, concluded that the scheme retained great potential for improving the health of pregnant women, mothers and young children from nutritionally vulnerable sectors of the population, and that the provision of free vitamin supplements offered a simple and potentially effective means of preventing adverse nutritional outcomes. However, it also recognised that the Welfare Food Scheme could be seen as providing a disincentive to breastfeeding, as the monetary value of the milk tokens was at least double if exchanged for infant formula rather than cows' milk (Department of Health, 2002a). Reforms to the scheme were subject to consultation with health professionals, welfare rights organisations and parent-support groups. There was similar concern among health professionals and mothersupport groups that the scheme provided greater value to families who were using infant formula, and that this devalued and disincentivised breastfeeding among low-income women (Machell, 2014). However, other responses strongly supported the role of the scheme as a nutritional safety net, providing additional spending power on food, which normally went to the woman in the household (Machell, 2014).

The COMA panel recommended that vitamin supplements were a valuable, cost-effective contribution to the nutritional status of low-income pregnant women and young children, but needed to be reformulated and promoted to recipients, as uptake rates were very low (Department of Health, 2002a).

Proposal for a new welfare food scheme: Healthy Start

A new welfare food scheme to be called Healthy Start was proposed in 2002. The development of the scheme was part of a wider effort by Governments across the UK to improve health in early life and reduce health inequalities. The policy linked to a range of developments affecting families and young children, including changes in nutrition policy such as the National School Fruit Scheme, the Five A Day programme and the promotion of breastfeeding through the Infant Feeding Initiative in England, and Breastfeeding Strategies in Scotland and Wales.

Hazel Blears, the Public Health Minister at the time, said:

"These proposals will help lay the foundations for the good health of future generations. Good nutrition in pregnancy and early childhood is a key element in preventing obesity, cancer, coronary heart disease and strokes later in life. People with low incomes suffer more ill-health. By improving the nutritional benefit of the scheme, and making healthy options easier options, we can help to reduce these unfair inequalities." (Department of Health, 2002b).

Department of Health analysis in 2005 had identified effective areas for interventions to narrow the gap in infant mortality, including:

- improving nutrition in women in disadvantaged groups of childbearing age, for example by ensuring full uptake of Healthy Start food vouchers by pregnant women in disadvantaged areas
- increasing breastfeeding initiation and duration rates in disadvantaged groups, as breastfeeding rates are much lower in these groups (Department of Health, 2005).

From a policy perspective, the new scheme was also presented as part of the Department for Work and Pensions' Opportunity for All strategy to tackle poverty and social exclusion. The press release explained:

"... in line with the Government's commitment to tackling health inequalities the reformed scheme would provide better nutrition and greater choice in a healthy diet for over 800,000 people in low income families – making the most effective use of the £142m funding each year in England, Scotland and Wales."

(Department of Health, 2002b).

The key proposed changes from the previous welfare food scheme suggested were:

- to broaden the nutritional value of the scheme by adding fruit and vegetables to the liquid milk and infant formula currently provided
- to offer wider access to these foods through a fixed-value voucher (The voucher would be of broadly equivalent value to the then current allocation, which was 7 pints of liquid milk.)
- to link the scheme more closely with the NHS through antenatal and postnatal clinics.

The scheme was also supposed to provide:

- a communications campaign aimed at families, to encourage their use of the scheme and to give them advice about diet and health, and
- a communications and training programme for health professionals, to support them in targeting women and families in the most vulnerable groups (Department of Health, 2005).

When the Healthy Start Scheme was proposed, it was designed with the idea that eligible pregnant women (including all under-18s), mothers and young children in low-income families had greater access to, and encouragement from, health professionals and others to eat a healthy diet. Women on a low income are less likely to register with a midwife or doctor early in the pregnancy (Department of Health, 2002c). As the health professional's signature is needed to confirm that the woman is pregnant, the thinking was that the scheme would provide an incentive to book earlier (Department of Health, 2002c). However, there were some concerns, raised by the Maternity Alliance and Royal College of Nursing, that if health professionals became the 'gatekeepers' of

the scheme, it might interfere with the important relationship between health professionals and parents (Machell, 2014).

Vitamin supplements continued to be provided to pregnant or breastfeeding women and children under 4 years of age in low-income families as part of the Healthy Start scheme. Before 2006, women's vitamin supplements contained vitamin A. The reformulation removed vitamin A, as there was concern about the potential effect of too much vitamin A on the developing foetus (Department of Health, 2002a). Healthy Start vitamins for women contained vitamin D, vitamin C and folic acid.

Introduction of Healthy Start in 2006

In November 2005, the Healthy Start scheme was introduced as a pilot scheme in Cornwall and Devon, to test the concept and practical aspects. During the pilot, the systems and processes underpinning delivery were expected to be thoroughly monitored and evaluated and lessons learned prior to roll-out across the whole of the UK (Dyson et al, 2007).

However, the new scheme was rolled out nationwide from November 2006 without this evaluation taking place. Existing Welfare Food Scheme recipients were automatically transferred on to the new scheme. All pregnant women under 18 years of age were added to the qualification criteria, in recognition of the additional nutrition needs of pregnant women who are still growing.

The rollout was not without criticism. In 2006, the Citizens Advice Bureau (CAB) said about Healthy Start:

"In our view the system is not fit for the purpose of promptly delivering this vital support to a highly vulnerable client group. These flaws are compounded by administrative delays and confusion, and by poor communication channels relied upon by clients to resolve their problems."

"Claimants have suffered because too much attention has been paid to complex organisational and administrative arrangements, without enough thought being given to customer service delivery. The result is a service which is not customer focussed."

(Citizens Advice Bureau, 2006.)

Since the introduction of Healthy Start in 2006, there have been two changes to the food voucher scheme. Firstly, the value of the voucher was uprated in 2009 from £2.80 to £3.10, the value it has remained at since that date. Secondly, after a review by the Fruit and Vegetables Task Force (Fruit and Vegetables Task Force, 2010), a recommendation was made to include plain frozen fruit and vegetables in the Healthy Start scheme, and this was implemented in 2011. The Healthy Start vitamin coupon scheme has remained in place, but changes to local provision and national recommendations have made this a more complex policy area.

Although the vouchers state that they can be used for 'infant formula milk' – which by definition is for babies under 12 months – some retailers were not clear that follow-on formulas were excluded. There was a suggestion that the vouchers themselves could be amended to clarify that only infant formula milk 'suitable from birth' is permitted in exchange for Healthy Start vouchers (Department of Health, 2012).

In November 2016, Healthy Start was included within Universal Credit legislation in Statutory Instrument 2016, No 985 (Statutory Instruments, 2016).

How has Healthy Start been included in policy in England, Scotland, Wales and Northern Ireland since its introduction?

England

NICE reiterated the importance of Healthy Start in its Public Health Guidance in 2008 and in *Quality Standards for Maternal and Child Nutrition* in 2015 (National Institute for Health and Clinical Excellence, 2008; National Institute for Health and Care Excellence, 2015b). The childhood obesity plan, launched in 2016, re-committed the Government in England to the Healthy Start scheme (HM Government, 2016a).

Public Health England points out that health professionals should be aware of Healthy Start and advise clients on access to the scheme to improve the health of low-income pregnant women and families on benefits and tax credits (Public Health England, 2017b).

Childhood Obesity: A Plan for Action, Chapter 2, published in June 2018, included a commitment for a consultation on how Healthy Start can improve the fruit and vegetable intake of young children (Department of Health and Social Care, 2018).

Scotland

Improving Maternal and Infant Nutrition: A
Framework for Action – published by the Scottish
Government in 2011 – sets out action that can be
taken by NHS Boards, local authorities and others
to improve the nutrition of pregnant women,
babies and young children in Scotland (Scottish
Government, 2011). There is a Healthy Start
named lead in every NHS board area, as well as
infant feeding advisors and a named maternal and
infant nutrition lead. The Scottish Government
also facilitates a national Healthy Start leads
network to share good practice.

Responsibility for Healthy Start passed to the Scottish Government as part of the Scotland Act in 2016 (HM Government, 2016b). The Scottish

Government introduced free Healthy Start vitamins for all pregnant women in April 2017.

A short-term working group was also set up in 2016 to develop ideas on how the Healthy Start scheme could reduce costs and improve outcomes for low-income families in Scotland. The group considered ways to improve the working of the scheme, to reduce administration costs where possible and to enable more eligible families to access the scheme by making changes to the nature of the benefit entitlement conditions or method of delivery. The group proposed a new scheme – Best Start Foods – to replace the Healthy Start scheme.

The consultation on the new scheme was undertaken in 2018 (closing at the end of June 2018). The proposal was to link registration for the new Best Start Foods scheme with the Best Start grant, so that women can start their claim as soon as their pregnancy is confirmed, and to introduce an electronic card system. Eligibility for the scheme would be increased, with the threshold for those on Universal Credit increased to be in line with the threshold for eligibility for free childcare for children of 2 years of age. The value of the vouchers would be increased to £4.25, but continue only for the first three years of a child's life. The value of the scheme to families would be higher overall for families on the relevant benefits. Children aged 3 and 4 years would be entitled to an early learning and childcare place with a free meal and possibly a healthy snack (as part of a nursery milk offer) from 2020.

The proposal also suggested an increase in the range of eligible products under Best Start Foods to include tinned fruit, vegetables and pulses, dried pulses and eggs, with the aim of increasing choice and accessibility for families. There is planned work with partners to build opportunities to promote a healthy diet through Best Start Foods (Scottish Government, 2018b). The consultation can be accessed at: https://consult.gov.scot/health-protection/welfare-foods/user_uploads/sct0218087754-1_welfarefoods_p4.pdf

Wales

Healthy Start is currently promoted to parents in *Bump, Baby and Beyond* (Public Health Wales NHS Trust, 2014), and in the Welsh Government's *Infant Feeding Guidelines for Health Professionals* (Welsh Government, 2015). Current data available indicate that the uptake of Healthy Start vitamins in Wales is very low.

Northern Ireland

Information about the Healthy Start scheme for pregnant women and new parents is available on NI Direct at https://www.nidirect.gov.uk/articles/free-milk-fruit-vegetables-and-vitamins

Information on the Healthy Start scheme is also given in the Public Health Agency publications *The Pregnancy Book* and *Birth to 5* – which are available to expectant mothers and are distributed by community midwives who are encouraged to publicise the scheme. The Northern Ireland Government has provided funds to voluntary organisations such as TAMBA, Women's Information Northern Ireland and Life NI, who are encouraged to publicise the Healthy Start scheme as part of their work with individuals and other organisations.

In Northern Ireland, Healthy Start vitamins are not available through pharmacies and must be ordered by post.

How was the new scheme communicated, and how were health professionals trained to administer it?

In answer to a written Parliamentary Question on communicating information about the new welfare food scheme in December 2004, the then public health minister Melanie Johnson provided the following information.

"Miss Melanie Johnson: The welfare food scheme has been in existence since 1940 and information campaigns have been run periodically. The most recent communication campaign was to promote the new application process for pregnant women, introduced on 1 October 2004, that provides greater opportunities for healthcare professionals to offer pregnant women advice on diet and nutrition. This campaign, which is the first stage of the reform of the welfare food scheme, cost £78,923, including the distribution of the materials through the waiting room information service.

To support this new application procedure and the implementation of 'Healthy Start', we published an infant feeding and child nutrition resource pack on 26 November 2004 that has been distributed to all members of the Royal College of Midwives and the Community Practitioners and Health Visitors Association. We are currently drawing up further plans for a comprehensive communications campaign to promote 'Healthy Start' to parents, health professionals and food outlets. The implementation of this and a number of other initiatives announced will be in a delivery plan for the White Paper to be published early in 2005."

The communications plan was mentioned in *Choosing a Better Diet: A Food and Health Action Plan*, published in March 2005 (Department of Health, 2005), but the plan had largely disappeared from policy discussions by the time the scheme was rolled out in 2006.

A training scheme for health professionals was commissioned by the Department of Health, organised by Nutrition4 and run by dietitians prior to the pilot of Healthy Start in Devon and Cornwall. Their report recommended a whole day's training be provided for midwives and health professionals who would implement the scheme across the UK (Nutrition4, 2005). The evaluation of the pilot as a whole found knowledge about some elements of the scheme remained low, and concluded that the training of health professionals was fundamental to the programme's success and that there should be national evaluation tools to aid future evaluation (Hills et al, 2006).

Nutrition4 recommended that, given the scale of training required for Phase 2 – the introduction of Healthy Start across the UK – a train the trainers approach should be adopted. Dietitians across the UK could be trained to deliver a standard training package to health professionals at a local level. This cascade system would allow information to be effectively and rapidly disseminated to large numbers of health visitors, midwives and other professionals within a defined time frame. Despite the fact that the training had been well received and was considered to be an extremely important

component of the scheme, the roll-out was shelved (Machell, 2014).

An online training pack was later developed and made available on the Department of Health website, but it is not clear how many health professionals knew about this or accessed it and it has since been removed. Lucas et al, in their evaluation of Healthy Start, found that training for health professionals on the scheme varied across the 13 study sites, but in general was not a high priority (Lucas et al, 2013). Most areas reported that no training had taken place with health professionals, and the training sessions that had been given tended to concentrate on vitamin supplementation. Most of the health visitors and midwives interviewed said that they would value training covering eligibility for the scheme and fit with other benefits, recommendations for vitamins, and what the vouchers could be used for.

Some local authority public health departments have provided or commissioned training for health professionals and children's centre staff, which may be one factor in improving uptake rates in some areas.



APPENDIX Areas offering free Healthy Start vitamins

Table 9: Areas offering free Healthy Start vitamins, either universally or part-universally, July 2018

'Universal' means that vitamins are given to all those groups who would receive vitamins if eligible for Healthy Start: pregnant women, women breastfeeding in their baby's first year, infants and children up to the age of 4 years.

SCOTLAND	
From April 2017, all pregnant women have been entitled to free Healthy Start vitamins.	
ENGLAND	
Barnsley Metropolitan Borough Council	Part-universal – All pregnant women are given two months' free supply at booking. Breastfed infants are given two months' free supply from birth and another two months' supply at 8-12 months. Formula-fed babies are given a two-month supply at 8-12 months.
Birmingham City Council	Universal distribution for pregnant women and children under the age of 4 years
Birmingham Community Healthcare NHS Trust	Universal
Bradford Council	Universal
Halton Borough Council	Part-universal – All pregnant or breastfeeding women receive a supply of vitamin tablets. Each child receives one bottle of vitamin drops before they are 6 months old.
Hartlepool Borough Council	Universal
Herefordshire Council	Universal
Knowsley Council	Universal
Liverpool City Council	Universal
London	See next page.
Middlesbrough Council	Universal but including all children up to 5 years of age
Redcar and Cleveland Council	Universal
Salford City Council	Universal
Solihull Metropolitan Borough Council	Part-universal – All pregnant and breastfeeding mothers
Southampton Council	Universal
Stockton-on-Tees Council	Universal
Telford and Wrekin Clinical Commissioning Group	Universal
Wolverhampton Council	Part-universal – All pregnant women, mothers until 6 months postnatally and children under 2 years of age.

LONDON	
Camden and Islington Public Health	Universal
Kensington and Chelsea and Westminster	Universal
City of London	Universal
Greenwich	Part-universal – 3 bottles provided to women at antenatal booking
Hammersmith and Fulham	Universal
Hackney	Universal
Haringey	Universal
Islington	Universal
Lambeth	Universal
Lewisham	Universal
Southwark	Universal
Waltham Forest	Part-universal – Three bottles provided for all mothers at antenatal booking
Tower Hamlets	Universal

APPENDIX

Further information on breastfeeding

reastfeeding is the normal way to feed babies and a huge body of data exists to support public health measures to better support women to breastfeed. The Healthy Start scheme suggested at its inception that one of its goals was to increase breastfeeding rates, but the scheme itself does nothing specifically to support breastfeeding. Further information is provided here on the rationale for additional breastfeeding support and current breastfeeding rates in the UK.

Rationale for providing additional breastfeeding support

In the short term, not breastfeeding increases the risk of admission of the infant to hospital for gastroenteritis and respiratory disease (Quigley et al, 2007; Victora et al, 2016). A meta-analysis of large, high-quality studies found that, in the longer term, longer periods of breastfeeding were associated with a 13% lower risk of overweight or obesity, which was consistent across different income groups. In line with this there was a reduction in the incidence of type 2 diabetes, and a possible protective effect against type 1 diabetes (Victora et al, 2016).

Not breastfeeding has been consistently associated with lower performance in intelligence tests in children and adolescents. Combined analysis of studies controlling for confounding factors, including maternal intelligence, found a 2.6 IQ point difference, with a clear dose-response effect (Victora et al, 2016). In the UK, analysis of white children from the Millennium Cohort Study found that not breastfeeding was associated with reduced cognitive ability, particularly in children born pre-term (Quigley et al, 2012).

Low breastfeeding rates in the UK lead to an increased incidence of illness that has a significant cost to the health service. For just five illnesses (breast cancer in the mother, and gastroenteritis, middle ear infection, respiratory infection and necrotising enterocolitis in the baby), moderate increases in breastfeeding would translate into cost savings for the NHS of up to £50 million annually, and tens of thousands of fewer hospital admissions and GP consultations (Renfrew et al,

2012). There is therefore a strong financial case for investing in better support services to enable women to start breastfeeding and continue for as long as they want to.

In addition, analyses on cognitive ability, childhood obesity and Sudden Infant Death Syndrome (SIDS) indicate that modest improvements in breastfeeding rates could also lead to substantial savings in cost to the country and, in the case of SIDS, children's lives (Renfrew et al, 2012).

Rates of breastfeeding in the UK

UK-wide surveys have consistently shown that low-income and younger women are least likely to start and continue to breastfeed (McAndrew et al, 2012).

England

From the last UK-wide survey of infant feeding practices it was reported that breastfeeding initiation rates in England increased from 78% to 83% between 2005 and 2010 (McAndrew et al, 2012), but a third of women stopped breastfeeding in the first six weeks. The most recent quarterly data for England reported an initiation rate of 75% (NHS Digital, 2018a), with 42.8% of women still offering any breastmilk at 6-8 weeks and 29.4% exclusively breastfeeding, although these data are not complete (Public Health England, 2018).

For more information, see *Maternity Services Monthly Statistics, England. Experimental Statistics*, produced by NHS Digital, at www.digital.nhs. uk/catalogue/PUB30017. For information on completeness of data, see http://digital.nhs.uk/catalogue/PUB30162

Scotland

According to ongoing data collection in Scotland, 63% of babies were 'ever breastfed', that is, were breastfed for at least some period of time after their birth. Half of babies (51%) were being breastfed at their health visitor first visit (around 10 days of age), 37% exclusively and 14% mixed feeding. By the 6-8 week review this had fallen to 41% of babies (NHS National Services Scotland, 2017).

Figures were higher in the Infant Feeding Survey carried out in 2017. Three-quarters of respondents to both postnatal surveys had 'ever' breastfed and/or expressed breast milk for their new baby. By the time babies were 6 weeks old, 55% of women reported that they were giving breastmilk and 37% were exclusively breastfeeding at 6-9 weeks of age (Scottish Government, 2018a).

In a recent Scottish survey, 65% of mothers who lived in the most deprived areas in Scotland started to breastfeed, compared to 86% of those living in the least deprived areas; these rates fell to 45% and 67% respectively after six weeks (Scottish Government, 2018a).

For more information, see Breastfeeding Statistics Scotland, produced by NHS National Services Scotland, at https://www.isdscotland.org/Health-Topics/Child-Health/Publications/2017-10-31/2017-10-31-Infant-Feeding-Report.pdf?51186770201

Wales

Information on breastfeeding at birth for Wales and its Health Boards is published annually using data from the National Community Child Health Database (NCCHD). Approximately 61% of babies are breastfed at birth (percentage of all births with known breastfeeding status).

Data on breastfeeding is collected at birth, 10 days, 6-8 weeks and 6 months and published at Health Board level. However, data collection is not yet complete.

For more information, see *Births in Wales 2006 - 2016: Data from the National Community Child Health Database. Statistics for Wales*, produced by the Welsh Government, at http://gov.wales/docs/statistics/2017/170816-births-2016-datanational-community-child-health-database-en.pdf

Northern Ireland

Data on infant feeding is provided through the Department of Health's Child Health System (CHS) and the Northern Ireland Maternity System (NIMATS). A summary of infant feeding data from 2010-2015 can be accessed at http://www.niassembly.gov.uk/globalassets/documents/raise/publications/2016-2021/2017/health/0917.pdf

In 2015, data reported showed that 54% of women were not breastfeeding at all at hospital discharge (with 38.6% exclusively breastfeeding and 7.4% partially breastfeeding) By 10-14 days 34.8% of women are still breastfeeding, by 6 weeks this has reduced to 27.6% and by 6 months only 11.7% of babies receive any breastmilk.

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