

## Early Years Nutrition: Setting the Standard for Change

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A REPORT BY THE CROSS-PARTY GROUP  
ON A FIT AND HEALTHY CHILDHOOD

# **EARLY YEARS NUTRITION: SETTING THE STANDARD FOR CHANGE**

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We thank Catherine Lippe Nutrition for the financial support that made this Report possible and wish to make it clear that the Catherine Lippe Nutrition neither requested nor received approval of its contents.

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## **PREFACE - JONNY**

## **THE CROSS-PARTY GROUP**

The Contributor Group that produced this Report is a sub-group of the Cross-Party Group on a Fit and Healthy Childhood.

The purpose of the CPG is to promote evidence-based discussion and produce reports on all aspect of children's health and wellbeing, to inform policy decisions and public debate relating to children and young people; and to enable communications between interested parties and relevant parliamentarians.

The Contributor Group is chaired by Helen Clark, a member of the CPG secretariat. The contributors are volunteers from the CPG membership with an interest in this subject area and listed on Page 2.

The Report is divided into themed subject chapters and concludes with some recommendations that we hope will influence active Government policy.

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## EARLY YEARS NUTRITION: SETTING THE STANDARDS FOR CHANGE

### THE CROSS-PARTY GROUP ON A FIT AND HEALTHY CHILDHOOD

#### Introduction

On 30 January 2025, the Government responded to the recommendations of the House of Lords' Food, Diet and Obesity Committee in its report: [‘Recipe for Health: a plan to fix our broken food system’](#)

The Lords did not pull their punches, asserting that:

*‘Obesity and its consequences constitute a public health emergency that represent a ticking time bomb for the nation’s health.’*

Introduction to the [Government response](#) appeared to concur by acknowledging that reshaping the current unhealthy food environment required:

*‘Effective action across government, including devolved governments and local authorities, as well as across industry and all of society.’*

But what constitutes ‘effective action’?

Health Secretary, [Wes Streeting, was swift to announce:](#)

*‘A major shift in the focus of healthcare from sickness to prevention and towards meeting our Government’s ambition to give every child a healthy, happy start to life.’*

Bold words indeed - and since its election in 2024, the Labour Government has placed a new focus on advertising restrictions for foods high in fat, sugar or salt, combined with improving school food standards and introducing a pilot scheme of free breakfast clubs in primary schools prior to national roll out.

Added to the above:

*‘There is substantial evidence that early life nutrition influences adult health outcomes...Interventions to avoid adult chronic diseases must prioritise nutrition in early life.’:* [Early-life nutrition and adult-life outcomes](#)

In his annual report, Chief Medical Officer, Professor Sir Chris Whitty, emphasised the significance of nutrition in realising life-chance equalities for children. The report posits potential solutions to the present disparities such as introducing healthy food sales targets for businesses, specific taxes on unhealthy foods and making it mandatory rather than voluntary for firms to report on what type and volume of food they sell:

*‘Food related ill health is not experienced equally by children, families and communities across the country, with children and families living in more deprived areas more acutely affected by a food system where the unhealthy options are often the most available.’*

[Professor Whitty has predicted](#) that children’s lives will be ‘*shorter and unhealthier*’ unless there is ‘*meaningful change*’.

Writing in ‘The Guardian’ ([More than they can chew](#), 15 March 2025), Bee Wilson remained to be convinced of the current Government’s resolve to do more than tinker at the edge of ‘*meaningful change*’ in nutrition policy for children; characterising the formal response to the Lords’ report as:

*‘Half-hearted to say the least ..... Wes Streeting has said it is Labour’s ambition to make “our country’s children the healthiest generation that has ever lived”.’*

But apparently this doesn’t extend to helping them to eat healthier food during their very earliest months.

Our report calls for bold words to be backed by resolute **deeds** and encouragement to be underpinned by statute. The ‘*healthiest generation that ever lived*’ will only be achieved by truly ‘*effective action*’ including:

- Setting stronger standards at the outset
- Prioritising training for all health and education professionals
- Broadening the strategy to include dental health and physical activity and
- Legislating where necessary to address immediate health concerns and inequalities.

The prize is a healthier, more resilient and productive adult generation: a worthy goal for government and the best realisation of ‘*meaningful change*’.



## CHAPTER ONE: PRECONCEPTION AND PREGNANCY

The quality of nutrition both before and during pregnancy is known to impact the next generation in ways that may be lifelong.

These include fertility, child growth and development and the emergence of later non-communicable diseases such as cardiovascular disease and diabetes.

Poor maternal nutrition prior to pregnancy can increase the likelihood of low birth weight, pre-term birth and developmental disorders (Stephenson J, Heslehurst N, Hall J, Schoenaker DAJM et al (2018) [‘Before the beginning: nutrition and lifestyle in the preconception period and its importance for future health’](#) Lancet) and there is a growing understanding that paternal nutrition may impact pregnancy and child outcomes (Fleming TP, Watkins AJ, Velazquez MA, Mathers JC et al (2018) [‘Origins of lifetime health around the time of conception: causes and consequences’](#) Lancet).

Ways in which to communicate the benefit of good nutrition before conception and during pregnancy include the use of public health campaigns, improved training for health professionals at all levels and facilitating greater access to healthier food and supplements. However, around 45% of pregnancies and one-third of births in England are unplanned and these and other measures taken together and in isolation will be insufficient ([Health Matters: reproductive health and pregnancy planning](#), 26 June 2018).

**It is essential that some effective policies are also introduced at population level to improve nutritional status before and during a pregnancy.**

Consuming a ‘Mediterranean’ diet rich in vitamins, minerals, antioxidants and ‘healthy’ fats will boost overall reproductive health, the chances of conception and the development of the foetus (Kermack AJ, Lowen P, Wellstead SJ, Fisk HL, Montag M et al (2020) [‘Effect of a 6 week ‘Mediterranean’ dietary intervention on in vitro human embryo development; the Preconception Dietary Supplements in Assisted Reproduction double-blinded randomised controlled trial’](#) Fertil Steril). Information about what such a diet might contain should be readily accessible online and available in person from community doctors, nurses and health visitors.

In addition, policies to improve pregnancy outcomes ought to address diet disparities that arise from socioeconomic inequalities as these lead to an approximate 40% increase in the risk of stillbirth, neonatal mortality, pre-term birth and low birth weight (Thomson K, Moffat M, Arisa O et al (2021) [‘Socioeconomic inequalities and adverse pregnancy outcomes in the UK and Republic of Ireland: a systematic review and meta-analysis’](#) BMJ Open 2021). It is also advisable to replenish the daily diet with some supplements as appropriate such as folate; a synthetic form of vitamin B9 supporting the prevention of potential neural tube defects (NTD) which occur in very early pregnancy.

Recent research has found that more than 9 in 10 healthy women trying to conceive have low or marginal status for common B vitamins or vitamin D. A trial involving supplementing mothers with these vitamins from preconception through pregnancy was found to halve the

rates of reducing pre-term delivery (Godfrey KM, Barton SJ et al (2021) [‘NiPPeR Study Group. Myo-Inositol, Probiotics and Micronutrient Supplementation from Preconception for Glycemia in Pregnancy: NiPPeR International Multicenter Double-Blind Randomized Controlled Trial’](#) Diabetes Care).

Green vegetables, beans, legumes and some citrus fruits are natural sources of folic acid but adding them to a diet will not provide sufficient quantity of the nutrient and the NHS recommends a daily dose of 400 micrograms to be taken before conception and until the end of the first trimester. Again, this is only a partial solution because just a third of UK women take supplements as advised (Schoenaker DAJM et al (2023) [‘UK Preconception Partnership. Women’s preconception health in England: a report card based on cross-sectional analysis of national maternity services data from 2018/2019’](#) BJOG) and approximately half of all pregnancies are unplanned.

About 850 NTD-affected pregnancies occur annually in England and Wales and from the end of 2026 onwards, folic acid fortification of flour will be mandatory in the UK. However, it will apply only to non-wholemeal wheat flour and the fortification level is predicted to reduce neural tube defects by 20% instead of the 83% predicted with fully effective fortification (Wald NJ, Vale SH, Bestwick JP, Morris, JK (2025) [‘Blood folate level needed for fully effective fortification in the prevention of neural tube defects’](#) Arch Dis Child 2025). In the USA and Canada, folic acid is provided on a population basis via mandatory fortification of flour.

Iodine supports foetal brain development and is found in dairy products and fish.

Studies in the UK have found that 1 in 9 women are iodine-deficient in the preconception period; linked in turn with a 7-point lower IQ in the children at age 6-7 years (Robinson SM, Crozier SR, Miles EA, Gale CR et al (2018) [‘Preconception maternal iodine is positively associated with 1Q but not with measures of executive function in childhood’](#) J Nutr). Iodine deficiency can precipitate inherited impairment as children of mothers with low iodine status in pregnancy are more likely to have children themselves with low IQ scores at age 8 (Bath SC, Steer CD, Golding J, Emmett P, Rayman MP (2013) [‘Effect of inadequate iodine status in UK pregnant women on cognitive outcomes in their children: results from the Avon Longitudinal Study of Parents and Children \(ALSPAC\)’](#) Lancet).

The growing popularity of more sustainable plant-based diets may have an adverse effect of increasing iodine deficiency and the UK differs from a large number of countries in that it does not advise pregnant women to take an iodine supplement. Such a recommendation would need careful tailoring to reflect local iodine status accompanied by population level monitoring to avoid under/excess dosing (Taylor PN, Vaidya B (2016) [‘Iodine supplementation in pregnancy – is it time?’](#) Clin Endocrinol).

Another option would be to adopt the World Health Organisation’s recommendation (in line with many other countries) of providing universal salt iodisation before and during pregnancy (World Health Organisation (2014) [‘Fortification of food-grade salt with iodine for the prevention and control of iodine-deficiency disorders’](#)). In addition, dietary advice to pregnant women should be revised, explaining the importance of iodine in pregnancy and suggesting natural sources for use in a daily diet.

Vitamin D status is low in about 22% of UK women aged 19-64 and blood markers of vitamin D status are lower in black and particularly in Asian women than in white women (McAree T, Jacobs B, Manickavasagar T et al (2013) [‘Vitamin D deficiency in pregnancy – still a public health issue’](#) Maternal & Child Nutrition). Oily fish is one source of it, but in the main, vitamin D is manufactured by the body when the skin is exposed to sunlight and the level fluctuates depending on the season of the year. Calcium and vitamin D are key nutrients for musculoskeletal health and maternal nutritional deficiency can lead to the formation of weak and poorly mineralised bones and the development of rickets in the infant (Fiscaletti M, Stewart, P et al (2017) [‘The importance of vitamin D in maternal and child health: a global perspective’](#) Public Health Rev).

The Scientific Advisory Committee on Nutrition (SACN) has recommended establishing national surveys to measure vitamin D status particularly in pregnant women and in minority ethnic groups (SACN (2016) [‘Vitamin D and Health’](#)). A recent UK trial has shown that taking a 1000 international unit daily vitamin D supplement from early pregnancy increases the chances of a natural delivery (Moon RJ et al (2022) [‘Does antenatal cholecalciferol supplementation affect the mode or timing of delivery? Post-hoc analyses of the MAVIDOS randomized controlled trial’](#) J Public Health) and is of lasting benefit to the child’s bones, as assessed at age 6 (Moon RJ et al (2024) [‘Pregnancy Vitamin D supplementation and offspring bone mineral density in childhood follow-up of a randomized controlled trial’](#) Am J Clin Nutr).

Only a small minority of teenage girls and young women meet dietary requirements for fish and seafood (Derbyshire E (2019) [‘Oily Fish and Omega-3s Across the Life Stages: A Focus on Intakes and Future Directions’](#) Frontiers in Nutrition, 6, 165).

Fish is a natural source of the Omega-3 polyunsaturated fats that are considered to be essential for normal foetal developmental and maternal wellbeing. UK pregnancy advice is to restrict intake to 2 portions a week despite a lack of evidence to support cited risks from mercury and other contaminants. Today overall, UK population fish intakes are below official NHS guidelines and in pregnancy, only 26% of women eat the recommended amount (Beasant L, Ingram J, Taylor CM (2023) [Fish Consumption during Pregnancy in Relation to National Guidance in England in a Mixed-Methods Study: The PEAR Study’](#) Nutrients).

**There is a clear need for revised/updated NHS and Eatwell guidelines for nutrition in pregnancy combined with specialised training for midwives and protected time in clinic appointments to discuss diet and nutrition** (Beasant L, Ingram J, Tonks R, Taylor CM (2023) [‘Provision of information by midwives for pregnant women in England on guidance on foods/drinks to avoid or limit’](#) BMC Pregnancy Childbirth).

Potential benefits of the Omega-3 nutrient range include normal brain and nervous system development, reduction of respiratory disease risk such as childhood asthma (Nevins JEH, Donovan SM et al (2021) [‘Omega-3 Fatty Acid Dietary Supplements Consumed During Pregnancy and Lactation and Child Neurodevelopment: A Systematic Review’](#) J Nutr) lessening of the occurrence of clinical level depression during pregnancy and post-partum and reduction in incidence of pre-term birth; itself the single biggest cause of resultant mental and physical illness and neonatal death in the UK.

Since 2015, studies worldwide have shown that increasing Omega-3 intake during pregnancy reduces pre-term birth, but recently revised NICE guidelines for nutrition in pregnancy do not mention this (NICE (2025) [‘Maternal and child nutrition: nutrition and weight management in pregnancy and nutrition in children up to 5 years’](#) NICE Guidance).

If the Government wishes to achieve better prevention of long-term health conditions, implementing evidence-based guidelines to reduce pre-term births via screening of Omega-3 intake in pregnant women (using a brief, validated questionnaire) followed by supplementation as necessary makes sense (Cetin I et al (2024) [‘Omega-3 fatty acid supply in pregnancy for risk reduction of preterm and early preterm birth’](#) American Journal of Obstetrics & Gynaecology MFM).

Women who are iron-deficient during pregnancy may be susceptible to anaemia. Data from the National Diet and Nutrition Survey (NDNS) for 2016-2019 showed that 49% of girls aged 11-18 years and women of 19-64 years had low iron intakes. [The World Health Organisation’s recommendation of daily iron supplementation during pregnancy](#) to reduce the risk of low birth weight, maternal anaemia and iron deficiency is not advised by the UK Government, possibly due to a desire not to exacerbate the constipation, and abdominal discomfort that can occur in late pregnancy. However, screening as above could offer targeted supplementation to those who would derive the greatest benefit.

Water forms the amniotic fluid in which a foetus is held, supports the increase in blood plasma volume and produces breast milk. Early stage vomiting causes fluid loss and, in some cases, precipitates the condition hyperemesis gravidarum, characterised by acute vomiting, severe dehydration and weight loss (Ducarme G & Dochez V (2015) [‘Hyperemesis gravidarum: a review’](#) Presse Med).

The benefits of water; a natural, calorie-free drink and an essential nutrient are often ignored when discussing pregnancy wellbeing. The Government should promote the adoption of healthy hydration before conception with guidance about consumption during pregnancy and post partum readily accessible on NHS websites and via discussion with appropriately trained healthcare professionals

The importance of nutrition before and during pregnancy extends beyond dietary vitamins and minerals to consideration of a healthy body weight. All nutritional guidance during the preconception, antenatal and postnatal stages should be sensitive to patient needs; especially concerning weight management which should be raised respectfully and with the patient’s consent.

Low body weight, overweight and obesity in both parents adversely affect fertility, maternity and child health outcomes. One in five UK women become pregnant with a body mass index in the obese range (Heslehurst N, Cullen E et al (2023) [‘Maternal Obesity and Patterns in Postnatal Diet, Physical Activity and Weight among a Highly Deprived Population in the UK; The GLOWING Pilot Trial’](#) Nutrients) thus substantially heightening the risks of sub fertility, miscarriage, gestational diabetes, raised blood pressure in pregnancy, pre-term delivery and many other pregnancy complications (Life Cycle Project-Maternal Obesity and Childhood

Outcomes Study Group; Voerman E et al (2019) [‘Association of Gestational Weight Gain with Adverse Maternal and Infant Outcomes’ JAMA](#)).

Maternal obesity is also linked with increased offspring risks of cardiovascular disease, non-alcoholic fatty liver disease, lower respiratory tract infections in infancy, wheezing illnesses and attention deficit hyperactivity disorder (ADHD) alongside increased risk of psychiatric disorders and colorectal cancer in adulthood (Dalrymple KV, El-Heis S, Godfrey KM (2022) [‘Maternal weight and gestational diabetes impacts on child health’](#) Current Opinion in Clinical Nutrition and Metabolic Care). Yet despite these risks, there has been insufficient focus on population scale policies to support parents in achieving a healthy weight before a pregnancy, and maternal obesity is likely to be an important contributor to the worsening maternal mortality rates in the UK (MBRRACE-UK (2024) [‘Saving Lives, Improving Mothers’ Care - Maternal mortality 2020-2022’](#)).

During the post-partum period, nutrition and weight management support may improve maternal and infant outcomes for subsequent pregnancies. The SWAN Study (Study of Women’s Health Across the Nation aimed to ascertain the effectiveness of a weight management programme in helping women lose weight and improve lifestyles after giving birth. Almost 200 women, living with overweight or obesity, from an ethnically diverse inner-city UK population were invited to participate. Women in the study who were offered the weight management programme saw a 13% weight reduction at 12 months post partum compared with 4.2% for the women offered normal care. Those who had a greater level of engagement derived greatest benefit (Bick D et al (2020) [‘Lifestyle information and commercial weight management groups to support maternal postnatal weight management and positive lifestyle behaviour: the SWAN feasibility randomised controlled trial’](#) BJOG).

Smoking during pregnancy is known to carry multiple risks to baby and child including:

- Slower growth and development
- Increased risks of birth defects
- Damage to the development of a baby’s brain and lungs and increased risk of developing asthma
- Impaired development and working of the placenta in pregnancy
- Increased risk of sudden unexpected death in infancy (SUDI)
- Increased risk of overweight and obesity in childhood
- Increased risk of attention deficit hyperactivity disorder (ADHD).

The NHS website cites a Buckinghamshire Healthcare NHS Trust initiative designed to reduce the number of pregnant women smoking at the time of giving birth by providing immediate access to a tobacco dependency advisor from the beginning of the pregnancy: *‘This is helping to improve engagement and uptake of smoking cessations services for those communities most likely to smoke, with latest data showing just 4.7% of women in their area are now smoking at time of giving birth.’*

It is noted that those living in more deprived areas are more likely to smoke in general (21%) than in less deprived areas (9%).

Initiatives to promote diet and nutrition in preconception and pregnancy for the optimal development of the foetus should reflect the diverse nature of the population. Rice consumption in the UK is increasing, partly due to a growing ethnic minority population (Schenker S (2012) [‘An overview of the role of rice in the UK diet’](#) Nutrition Bulletin) and more research is needed into arsenic exposure in pregnancy; in particular for women with a rice-based diet.

In addition, the cost-of-living crisis (especially in relation to food pricing) has made it increasingly difficult for women on low incomes to afford good quality diets. Interventions such as the Healthy Start vitamins scheme are valuable, but lack effectiveness in timing and coverage and are not given to all pregnant women. Renewed effort should be made to reach groups who are vulnerable to malnutrition through food insecurity and/or other issues. Specialist training and greater influence for health visitors who interact with women and families is crucial.

Government policy should focus on engaging young people with the importance of nutrition before and during pregnancy to ensure healthier future generations. Evidence exists to show that this can be achieved through embedding the science behind the health messages into the school education system (Woods-Townsend L, Hardy-Johnson P et al (2021) [‘A cluster-randomised controlled trial of the LifeLab education intervention to improve health literacy in adolescents’](#) PLoS).

Improving the nutrition of mothers both before and during pregnancy helps to prevent lifelong illness and disability and provides a foundation for the health and wellbeing of present and future generations.

However, a recent UK Government report indicates the scale of the task (Department of Health UK (2021) [‘The best start for life: a vision for the 1,001 critical days’](#) The Early Years Healthy Development Review Report 1-146). The six ‘Action Areas’ focused in detail on the needs of babies and families after birth but placed little importance on the role of nutrition in the post-natal period. **Nothing whatsoever was said about improving the nutrition of the mother before and during pregnancy.**

## CHAPTER TWO: INFANT FEEDING AND THE ROLE OF FAMILY

Long-term health outcomes are profoundly impacted [by infant feeding patterns](#) and good nutrition promotes healthy eating habits; supporting growth and development and lessening the risk of future disease and co-morbidities. Clinical and public health guidance is predominantly focused upon mother-child dyads but the family unit embraces immediate relatives, grandparents and even long-held custom. It is often pivotal in shaping infant feeding practices. Influencing families prior and post conception can impact the health of successive generations, and countries that under-invest in the wellbeing of women and children in the [first 1,000 days](#) may face a grim reckoning of lower economic productivity and higher health costs.



Optimal nutrition in a child's first two years of life lowers morbidity and mortality, cuts the risk of chronic disease and fosters better development overall.

Breastfeeding promotes healthy development and discourages later obesity, whereas a precipitate introduction of formula or unhealthy complementary feeding practices can disrupt growth and heighten the risk of later non-communicable diseases (Tint MT, Godfrey KM et al (2025) '*Modifiable perinatal influences on child obesity: lessons from the GUSTO longitudinal birth cohort study in Singapore*' In: Sobrevia L(ed). Fetal Programming in Obesity and Diabetes. International Union of Physiological Sciences – in press).

UK breastfeeding rates are lower than in most high-income countries yet support for **healthy** complementary feeding practices is patchy and regulation of the nutritional content of infant weaning foods requires a stronger focus amongst policymakers.

WHO and UNICEF recommend:

- Initiation of breastfeeding within an hour of birth
- Exclusive breastfeeding for the first six months of life; and
- Introduction of nutritionally adequate and safe complementary foods at six months together with continued breastfeeding up to two years of age or beyond (UNICEF (2022) '*UK Baby Friendly Feeding Survey*').

Breastfeeding benefits are well established but rates are low (Simpson DA, Carson C, Kurinczuk JJ, Quigley MA (2022) '[Trends and inequalities in breastfeeding continuation from 1 to 6 weeks: findings from six population-based British cohorts 1985-2010](#)' Eur J Clin Nutr).

According to the [UK Infant Feeding Survey of 2010](#) (McAndrew F, Thompson J, Fellows L et al (2010) London Health and Social Care Information Centre) 66% of women were not breastfeeding at six months despite the fact that 69% of infants were being breastfed at one week.

[A 2020-2021 report on breastfeeding](#) by the Office for Health Improvement and Disparities found the rate of exclusive breastfeeding at 6-8 weeks to be 36.5% with partial breastfeeding at 17.7%. Lowest rates were found amongst those living in the most deprived areas; white or young mothers and parents had the lowest and black or older mothers or parents the highest breastfeeding rates.

[Feeding decisions may be influenced](#) by the opinion of the mother's family and friends. One study found that previous experience of breastfeeding, attendance at antenatal breastfeeding classes and a husband/partner's preference for breastfeeding were associated with higher maternal intention to breastfeed. Therefore, support and education about feeding stand more chance of success if they are designed to engage the wider family as well as the mother.

The World Health Organisation recognises the importance of involving fathers, grandparents and other primary caregivers in programmes offering information and advice on how to provide effective care; in particular the improvement of nutrition outcomes (Martin S et al (2021)

[‘Engaging family members in maternal, infant and young child nutrition activities in low-and middle-income countries: A systematic scoping review’](#) Maternal and Child Nutrition).

Receiving inconsistent or conflicting information about breastfeeding (often in a rushed encounter with a health professional) contributes to the challenges in persisting. All discussions should be supportive rather than capable of being perceived as judgemental or intrusive. Improving breastfeeding rates could bring cost savings to the health service as it is linked to the prevention of breast and ovarian cancer, diabetes and obesity in breastfeeding mothers and the prevention of infections and obesity in babies (NICE (2025) [‘Maternal and child nutrition: nutritional and weight management in pregnancy and nutrition in children up to 5 years’](#) NG247).

However, messaging such as ‘breast is best’ may have a counter-productive effect of categorising women into those who are and are not ‘doing their best’ for their babies. Infant feeding advice in the UK is often presented as a judgement of mothering rather than a means of support to help mothers make decisions that are best **for them and their babies**.

Parents should have their choices respected; whether opting to breastfeed, use formula or a combination of both. It is crucial that health professionals are up to date with advice about all aspects of feeding and supporting the nutrition of the whole family. A British Specialist Nutrition Association Ltd (BSNA) survey of mothers, midwives and health visitors in 2021 [‘Parent and Baby Friendly: Enabling Informed Decision Making in Infant Feeding’](#) identified gaps in infant feeding support for families that may lead to practical and emotional consequences for parents:

- One in five healthcare professionals (HCP) felt that mothers were receiving insufficient advice and support to enable them to make informed decisions on how to feed their baby
- One third of mothers did not feel that they received sufficient information from HCPs
- Half of mothers said that they would have liked more information about combination or formula feeding.

In 2024, the Care Quality Commission Maternity Service ([Maternity Survey 2024](#)) found that 18% of respondents said that they did not receive help and advice from a midwife about feeding their baby in the four weeks after birth, while for 27% this only happened to *some* extent. Ensuring a positive start to infant feeding within the first few weeks is vital to equip families with the confidence to meet the physical, mental and emotional challenges that may arise with any feeding method.

**Government initiatives should prioritise the provision of comprehensive training to all professionals who work closely with families during the pre-natal and post-natal periods, ensuring that they are equipped with evidence-based nutritional knowledge to guide and support parents effectively in nourishing their babies and infants.**

The rise of the baby food industry has coincided with that of social media. NHS professionals are widely trusted (Aiken LH, Sloane DM et al (2021) [‘Patient satisfaction with hospital care and nurses in England an observational study’](#) BMJ open) but in many parts of the country the health visiting service provides inadequate cover; even failing to fulfil the five mandated



contacts in the English arm of the Healthy Child Programme (Cowley S et al (2018) [‘What makes health visiting successful – or not? 1. Universality’](#) Journal of Health Visiting).

However, the market for commercial baby foods has burgeoned and new parents are assailed by social media influencers pedalling commercial products from the brands with which they are professionally linked. Many parents therefore believe that formula-fed infants must move ahead from ‘Stage 1’ formula, observing the numbered tin sequence (Koletzko BV and Shamir R (2016) [‘Infant formula: does one size fit all?’](#) Current Opinion in Clinical Nutrition & Metabolic Care pp 205-207). This is entirely unnecessary.

Sophisticated food industry marketing confirms many parents and families in the erroneous belief that specialist infant food products are essential for good nutrition and family knowledge of what might constitute a healthy diet is itself uncertain. Older members who recall their own experience of introducing solid foods at different times simply compound the bewilderment of a new mother who may resort to ransacking social media in search of contemporary advice (Hollinrake G, Komninou S et al (2024) [‘Use of baby food products during the complementary feeding period: What factors drive parents’ choice of products?’](#) Maternal & Child Nutrition).

One solution is to enhance role of the health visitor who would spend more time working closely with the primary caregiver to promote good nutrition in pregnancy and post birth; continuing thereafter with the objective of instilling confidence in **all** those responsible for the infant during the first weeks and months of life. The remit would involve identifying and encouraging feeding goals (exclusive breastfeeding for a particular duration, using formula, or a combination of both) and supporting the wider family by suggesting ways in which to tailor advice to other caregivers. Health visitor contact beyond the postnatal period could encourage an environment conducive to the nurture of healthy, balanced eating behaviours by signposting caregivers to local early years services that engage with families outside of formal settings.

Oral health is reliant on good nutrition and an excessive consumption of added sugars (sugars found in foods other than grains, vegetables, whole fruit and milk) leads to dental caries and contributes long term to systemic problems including obesity, Type 2 diabetes and cardiovascular disease (Chi D & Scott J (2018) *‘The effects of added sugars on oral health and systemic diseases’* International Journal of Dental Science). The extraction of carious teeth is the most common reason for hospital admission of children in England (Levine RS (2021) [‘Childhood caries and hospital admissions in England: A reflection on preventative strategies’](#) British Dental Journal). Establishing healthy eating habits and oral hygiene routines early in a child’s life can have lasting benefit to health and wellbeing.

The British Society of Paediatric Dentistry (BSPD) (2018) [‘Statement on Infant Feeding’](#) recommends:

- Milk or cool boiled water to be the sole fluid given by bottle, and children not to be left with a ‘comfort’ bottle to suckle whilst asleep
- Extra sugars (eg table sugar) should not be added to bottles of formula feed or boiled water

- Early introduction (from six months) of a free-flow cup, to reduce the time that milk is in contact with the teeth, as per Department of Health recommendations
- The discouragement of bottle feeding from one year
- Consideration to be given to reducing on demand and night time feeds owing to emerging evidence of links with dental decay between these practices and complementary feeding after twelve months of age
- Where possible from 12 months of age, the final feed should occur before tooth brushing at bedtime so that the last thing on a child's teeth before sleep is fluoridated toothpaste.

'Free sugars' are any sugars **added** to food and drink and also include sugar found naturally in honey, syrups, nectars, unsweetened fruit juices, vegetable juices and smoothies. Sugar found naturally in milk, fruit and vegetables does not count as free sugar ([NHS Live Well](#)).

Formula milks (mainly follow-on formula and milks marketed for children over one year of age) were consumed by 36% of children between ages 1 to 1.5 years, which contributed 50% of free sugar intake and fruit juice (100% fruit juice and smoothies) contributed nearly 11% to free sugar intake in children aged 1.5 to 4 years (Office for Health Improvement and Disparities (OHID) (2024) '[Feeding young children age 1-5: Summary report](#)').

The widespread availability, affordability and popularity of cariogenic (dental caries generating) and tooth wear causing acidic food and drink combined with insufficient public awareness and in default of advice from a trusted professional like a health visitor, leads to unwise parental choice. Fruit juices offered in good faith for example, as an 'essential' source of good nutrition can cause extensive damage to children's teeth due to high sugar content and relative acidity.

Babies regulate their own energy intake to meet their needs; crying when hungry and stopping feeding when full. This 'responsive feeding' is now preferred by many feeding experts and other professionals including speech therapists, psychologists and dieticians. It is:

*'An approach to feeding and eating which facilitates the (re)discovery of internal cues, curiosity and motivation whilst building skills and confidence':*

['Responsive Feeding Therapy, Values and Practice'](#)

Rowell K, Wong G, Cormack J and Moreland H (2021) (Version 2)

Caregivers use responsive feeding practices by attending to hunger and fullness cues and can help children to develop better self regulation and lessen the propensity of later obesity. Understanding and responding appropriately to a child's hunger and satiety cues is described as: 'parent provides, child decides' (Satter E (2015) [Ellyn Satter's Division of Responsibility in Feeding](#)).

Findings from research on responsive parenting suggest that some of the benefits include:

- Children's attentiveness and interest in feeding
- Attention to their internal cues of hunger and satiety
- Ability to communicate needs to their caregiver with distinct and meaningful signals

- Successful progression to independent feeding (Black MM and Aboud FE (2011) ['Responsive feeding is embedded in a theoretical framework of responsive parenting'](#) Journal of Nutrition pp 490-494).

This feeding method discourages caregiver practices such as pressure, restriction, using food as reward, punishment or distraction and builds a positive feeding relationship. It has potential to promote health and wellbeing at the parent/child and family levels (especially if a health professional structures support for it involving the family) and should be a core component of feeding advice at public health level.

A pattern of poor-quality diet in infancy will generally be mirrored in the early years and increase the risk of obesity in later childhood (Okubo H, Crozier SR et al (2015) [Diet quality across early childhood and adiposity at 6 years; the Southampton Women's Survey](#) Int J Obes (Lond)). Diet in early childhood also impacts the development of neural tissues (Smithers LG, Golley RK, Emmett P et al (2012) ['Dietary patterns at 6, 15 and 24 months of age are associated with 1Q at 8 years of Age'](#) Eur J Epidemiol).

Maternal diet is a major influence on the quality of infant diet. Mothers who consume a high intake of fruit and vegetables, wholemeal bread, rice and pasta are more likely to observe current guidelines for infant feeding (Robinson S, Marriott L et al (2007) ['Southampton Women's Survey Study Group. Dietary patterns in infancy; the importance of maternal and family influences on feeding practice'](#) Br J Nutr).

A longitudinal study recorded the diets of children at 18 months and 43 months and compared intakes of nutrients and food groups between the two ages (Emmett P, Rogers I, Symes C (2002) ['ALSPAC Study Team. Food and nutrient intakes of a population sample of 3-year-old-children in the South West of England in 1996'](#) Public Health Nutrition). Between 18 and 43 months, the general pattern was for consumption of ultra-processed foods (UPF) to increase and that of the core nutrient dense foods recommended in the [Eatwell Guide](#) to decrease.

Children of the least educated mothers consumed around a third of Eatwell recommended foods while children of the most educated consumed around half the recommended amount. However, links with educational attainment were limited to fruit intake; all groups recorded very low vegetable consumption suggesting a need for education at population level to improve the quality of the overall UK food environment.

The economic context in which families live influences infant feeding and obesity prevalence among children living in the most deprived areas in England is more than double that of those in the least deprived areas. By reception year, 13.6% of children from England's most deprived areas have obesity compared to 6.2% in the least deprived areas (House of Commons Library ['Obesity Statistics'](#)). Children in families blighted by pervasive food insecurity are penalised by their lack of the regular access to adequate, safe and nutritious food that is needed for normal growth and development.

The cost-of-living crisis is affecting a growing number of households. 7.2 million adults and 2.7 million children across the UK were listed as food insecure in June 2024; a significant rise

in comparison with previous years ([Food Foundation](#)) and UK figures for food insecurity are the highest in Europe ([‘Food insecurity in UK is amongst worst in Europe, especially for children, says committee’](#) BMJ) affecting 18% of households with children. Socioeconomic disparities in weight gain present in the first few months of life and the quality of the home food environment and parental feeding practices will determine a child’s eating behaviours and weight gain.

In the UK today, many families are raising children in an obesogenic environment, triggered in large part by economic hardship within an increasingly digital world. Effective interventions and policies to promote good nutrition and healthy growth must be introduced without delay at population level but inequalities in child nutrition will persist until the Government starves the breeding ground of a cost-of-living crisis by introducing policies to reduce child poverty.

### **CHAPTER THREE: THE FOOD ENVIRONMENT: ROLE OF THE INDUSTRY AND GOVERNMENT**

Prime Minister Sir Keir Starmer launched the [Child Action Plan](#) saying:

*‘Healthy, happy children is not a nice to have, it’s a basic right, with economic urgency. We want the next generation to be chasing their dreams, not a dentist appointment. They should be aspiring to reach their potential, not reach a doctor.’*

However, achieving ‘the healthiest generation of children ever’ is easier said than done when:

- [Prevalence of obesity amongst reception-aged children](#) sat at 9.6% in 2023/24, whilst a further 12.4% were registered as overweight
- [More than 1 in 5 children in England aged 5](#) have already experienced dental decay whilst 10.7% of 3-year-olds show signs of it with an average of three teeth affected
- [Mean intake of sugars and saturated fats for children aged 1.5 to 5 years](#) exceeds recommended levels whilst intake of dietary fibre is below recommended level.

In addition, the prevalence of obesity is more than twice as high among children living in deprived areas and an obese child is five times more likely to have obesity in adulthood and more likely to become a parent living with obesity (House of Lords (October 2024) [‘Recipe for Health: a plan to fix our broken food system’](#) Report of the Food, Diet and Obesity Committee).

Policymakers’ goals for child health are impacted by the ethos and actions of the food industry and the report [‘Fuel Us Don’t Fool Us’](#) (2024) outlines the scale of the task:

*‘So many businesses are still locked in a business model of production, promotion and sales of overwhelmingly unhealthy products, despite numerous government health strategies and failed voluntary programmes. It shows that comprehensive action from inside businesses, along with government regulation is needed to shift the food system onto one that is not fuelled by driving food-related illnesses. Business and Government hold the levers of change. We now need action.’*

Strategies to improve population health through prevention should prioritise the earliest years of life and a Public Health England report (2019) [‘Foods and drinks aimed at infants and young children: evidence and opportunities for action’](#) stated that: *‘Infant and early childhood is perhaps the most critical time for establishing food preferences and dietary patterns’*.

The composition of first infant formula milks is regulated via retained EU directive (FSG) (609/2013) on Foods for Specific Groups; translated into law in the devolved UK. It encompasses first infant formula and follow-on formula for 6-12 months, and states that:

- Nutritional and health claims are forbidden for infant formula
- Labelling, presentation and marketing must distinguish clearly between infant and follow-on formula, inclusive of text, images and colours, to avoid confusion
- Advertising must be confined to specialist baby care and scientific publications
- Advertising must contain only scientific and factual information.

However, the baby food sector’s income increases healthily year on year and is projected to earn an extra £186.9 million between 2024 – 2029 (Statista (2024) [‘Revenue of the baby food industry in the UK 2019-2029’](#)).

Manufacturers have extended the customer purchasing base by exploiting a regulatory gap via ranges of ‘growing up milk’ branded to mirror their infant formula products. Instead of following government guidance by weaning onto cows’ milk or non-dairy unsweetened alternatives from 12 months, families are nudged to progress to sequentially numbered products that are unregulated in composition or marketing and designed to nurture the manufacturer’s bank balance.

The 2020 Public Health England consultation [Draft proposals: Commercial baby food and drink guidelines](#) attracted large stakeholder and non-governmental organisation (NGO) participation with industry expected to observe the final guidelines. However, they remain unpublished. The Department of Health and Social Care (DHSC) were also due to release proposals for consultation to improve the marketing and labelling of commercial baby food and drink but this has yet to occur.

In fact, apart from the regulation of first infant formula, Government obesity strategies have evaded the commercial challenge of infant feeding. Therefore:

- State-funded primary and secondary schools are bound by mandatory school food nutritional standards but nutritional guidance for nurseries and early years settings is voluntary
- Commercial baby and toddler foods are exempt from the current location promotions and the TV HFSS advertising restrictions commencing on 1 October 2025
- [The UK Nutrient Profiling Model](#) underpinning advertising and marketing regulation of HFSS food and drink is not aligned to dietary recommendations for babies and small children

- UK front-of-pack traffic light labelling is based on adult daily recommended intake (DRI) and is not applicable to formula or other commercial toddler snacks and weaning foods. There are no warning signals on packs
- The [Advertising Standards Authority's interpretation](#) of the CAP Code on non-broadcast marketing of HFSS food and drink encompasses outdoor advertising within 100m from primary and secondary school entrances, but does not apply to nursery schools or childcare centres.

The Scientific Advisory Committee on Nutrition (SACN) announced in July 2023 that commercially manufactured food and drink marketed specifically for infants and young children does not need to meet nutritional standards and a lack of advice from government adds to parental confusion as in the case of 'free sugars'. This relatively new term is widely misunderstood as it covers **all** sugars added to food and drink including processed fruits and sugar found naturally in unsweetened fruit juices, nectar, honey, syrups and vegetable juices in **addition** to table sugar.

In the official response to the [House of Lords Report on Food, Diet and Obesity](#) the Government referred to '*comprehensive regulations*' concerning nutritional and compositional standards for commercial baby foods, and adequate labelling and marketing standards '*to ensure consumers have clear and accurate information*'.

However, the only mandatory regulations specifically addressing the nutritional content of foods aimed at weaning, or at toddlers, are the '[Processed Cereal-based Foods and Baby Foods for Infants and Young Children \(England\) Regulations 2003 UK SI 3207](#)'. They are over 20 years old and do not even place limits on sugar content or the energy density of products.

In 2022, the level of parental perplexity was conveyed by opinion poll findings for Action on Sugar in its 2020 report [Baby & Toddler Breakfasts](#). 65% of parents surveyed expressed concern about the levels of free sugars in ready made/pre-packaged baby and toddler breakfast items with 87% wanting the amount of added sugars to be displayed prominently on the front of the packaging. The study also analysed nutritional content data for nearly 100 baby and toddler breakfast foods taken from a visit to 10 major retailers and found that:

- Over three quarters claimed to contain 'no added sugars' or 'only naturally occurring sugars' despite 70% of products being flavoured from processed fruit
- 16 of the products were declared suitable for children aged 4+ months, contradicting public health guidance
- The sugars content of analysed products ranged from <0.1g to 14.5g per serve and 0.3g to 33g per 100g
- Lower sugar versions of some products were possible, making a case for reformulation.

The 'baby aisle' in a retail outlet is often notable for a high number of sweet products; a statement reinforced by the research findings that prepared baby rice, ambient yogurt-based items and muesli contained no unflavoured items and only one vegetable flavoured item.



In 2021, Action on Sugar reviewed the nutrition content, labelling and 'on pack' claims of 73 baby and toddler sweet snacks from 10 major UK retailers (Action on Sugar (2021) [‘The sugars content of baby and toddler sweet snacks and the health halo that surrounds them’](#)). NHS guidance states that children under 12+ months of age should not consume snacks but thereafter consume 'mini meals' (NHS [‘Your baby’s first solid foods’](#)) yet 49% of snack products surveyed were aimed at the under 12 months age group.

Newly published work (Savanta research of 1039 parents, conducted in autumn 2024, included in Morpeth A, Threapleton, D (April 2025) [‘Baby Foods in Crisis’](#)) finds that 92% of parents living in deprived areas of the UK with children under the age of 3 use such products with 47% using 'mostly' or 'all of the time'. 30% of families use snack pouches daily and 38% several times per week. 64% report using savoury snacks such as sticks, puffs, mini-crackers and crisps either daily or several times a week.

In 2022, The World Health Organisation Regional Office for Europe published a Nutrient and Promotion Profile in order to align with best practice guidance on early years feeding ([‘Nutrient and promotion profile model; Supporting appropriate promotion of food products for infants and young children 6-36 months in the WHO European region’](#)). Clear directions were given for the food industry alongside potential for a legislative framework. However, impact has been negligible. In a recent study (Morpeth A, Threapleton D [‘Baby Foods in Crisis’](#) as above) found that 46% of all products contained added sugars or excessive levels of total sugars sufficient to warrant warning labels under WHO guidelines. Half (51%) of pouch-based products lacked guidance against drinking directly from the spout which contravenes NHS advice.

The [EU Commission Directive 2006/125/EC](#) on processed cereal-based foods and baby foods for infants and young children gives limits for certain processed cereal and baby foods and has been adopted by the UK but it is the only compositional criteria in place and there are major gaps in the regulation of free sugars content in the products. Limited restrictions on sugars in processed cereal-based food and drinks only apply at high levels.

Programmes are in place for reducing sugars in other food categories but baby and toddler products are not subject to any guidelines that would ensure a reduction in free sugars and salt to benefit young children.

There is an ambivalence surrounding the activities of a food industry simultaneously contributing to public health problems and engaging in activities to prevent them. Food companies produce vast quantities of hyper-palatable foods, high in sugar, food and fat and invest increased financial resources into developing and marketing the highly profitable calorie-dense products ([The National Food Strategy](#)). Similarly, their ample advertising budgets (£143 million by the top 18 UK food brands in 2017 versus £5.2 million by Public Health England on the *‘Change for Life’* campaign) enable enormous scope to entice parents to spend.

However, food companies are also actively involved in innovating and developing healthier products and there is engagement with 'social' programmes, such as sponsorship of school breakfast clubs and school and community sports events so that families are led to believe

that the food industry has an ‘approved’ health halo in school and society. The National Food Strategy (2021) refers to extensive lobbying by the food industry in Parliament and although successive Prime Ministers have argued for ‘bold’ measures to combat obesity, none have delivered them.

Regulatory action will depend on a mix of political factors, shifting public opinion towards changes to the food system that align with preventive health measures and sustainability goals and [willingness of corporations to accept change](#) but **credibility** will depend upon ending conflicts of interest. For example, the Scientific Advisory Committee on Nutrition has a specific food industry expert and six of the other fourteen members have conflicts of interest with the food industry ([‘Food industry ties’](#)). This is clearly unacceptable.

It is also important that all Government initiatives are reviewed to ensure that they do not inadvertently discourage healthy choices. One example is the upcoming Deposit Return Scheme (DRS) due to launch across England, Scotland and Northern Ireland in October 2027. A single, uniform deposit level could disproportionately impact natural source waters, particularly in multi-packs and lower cost formats, making them less competitive against larger, less healthy drink options. The Deposit Management Organisation should explore a varied deposit scheme that accounts for both purchase format and nutritional value of the product ensuring that water remains an affordable and attractive choice.

Achieving ‘the healthiest generation for children ever’ means that:

- Accustomed procrastination should be replaced by immediate legislation to set mandatory compositional and marketing standards of commercial infant foods
- Follow-on, toddler and growing-up milk must be subject to strict regulation.

Beyond regulation, the Government should prioritise ways in which to inform parents and caregivers about the importance of good nutrition. Only then will they be equipped with a secure knowledge of how nutrition impacts wellbeing and the confidence to make independent judgements based on mandatory nutrition and ingredients declaration. Despite evidence of the benefits of eating healthily to physical and mental wellbeing, neither the food industry nor the general public are currently highly motivated to change. A key element to incorporate into future food strategy is how to address this through education and increasing the awareness of how food and nutrition can impact health and wellbeing.

## **CHAPTER FOUR: NUTRITION IN EARLY YEARS SETTINGS: POLICY, PRACTICE AND STANDARDS**

Early Years settings, such as nurseries, childminders, pre-schools and children’s centres are uniquely placed to support child nutrition, improve child health and combat childhood obesity.

Many children consume a significant proportion of their weekly meals in settings and for some full-time attendees this means up to 15 meals a week. Children who receive balanced, nutritious meals in their early years are evidentially shown to be healthier, perform better in



school and can anticipate better lifelong health (Vaivada T, Gaffey MF, Bhutta ZA (2017) [‘Promoting early child development with integrated health and nutrition interventions: A systematic review and meta-analysis’](#) Pediatrics).

However, the quality and variety of food made available in EY settings is reliant upon the training of those managing them and their understanding of existing guidelines and sufficient funding.

The Department for Education (DfE) has recently published updated nutrition guidance for early years settings which is due to come into effect in September 2025. While not mandatory, this new guidance will become part of the safeguarding and welfare guidance of the Early Years Foundation Stage (EYFS) meaning that providers ‘should’ have regard to this nutrition guidance and are expected to follow it unless there is good reason not to do so.

The new guidance replaces the 2017 publication, Example Menus for Early Years Settings in England, and is intended to support providers in delivering on the existing EYFS statutory requirement that:

*‘Where children are provided with meals, snacks and drinks, these must be healthy, balanced and nutritious.’*

This wording has been criticised as vague and open to interpretation. Until now, many settings have done their best to meet this requirement without much in the way of clear support.

Whilst the new guidance is designed to be a supportive framework to help early years settings feel more equipped and confident about food provision, it is important to recognise the time and resources required to plan, prepare and deliver nutritious food in line with the guidance. The reality is that many settings are already stretched to their limits.

Settings have tried to help by giving the children extra food; but in the long run, must cover their costs and the most deprived families face further anxiety due to increased fees.

From September 2024, parents are able to access funded childcare hours if their child is aged between 9 months to around 4 years.

The increased number of children in early years settings will make the protection of mandatory nutritional standards and adequate funding for food even more essential so that the food given is accessible, nutritionally balanced, adequate and appropriate for children’s growth, development and wellbeing. At present there is no guarantee that this will be the experience of every child attending a setting although there are some examples of excellent practice such as those taking place at [Fountain Montessori Preschool](#) and covering in detail such matters as:

- The contents of a well-balanced diet
- Promoting healthy eating habits
- Hydration and snack management
- Food safety and allergy management

- Food and nutrition standards for childcare providers
- Staff training and parental engagement
- Shaping lifelong healthy habits.

The aim is to provide a nourishing, inclusive and engaging food environment which will set the foundation for a lifetime of healthy choices.

[TastEd](#) is a charity offering early years practitioners training and resources in sensory food education so that children will engage practically with foods (such as fruit and vegetables) that may not be familiar ingredients in their regular diet. By ‘normalising’ the texture, weight and smell of these healthy food options, the aim is for children to become less hesitant and enjoy them within their daily meals. Fruit and vegetables, are not only under-consumed by children across the UK, but are also in decline within the general population (2023 [Alexandra Rose Charity](#)).

The consumption of fruit and vegetables has become a critical gap in many children’s diets and after participating in the TastEd programme, one practitioner said:

*‘We found it very successful in encouraging some children in trying things they wouldn’t have before. We have had positive feedback from parents who have noticed a big difference at home.’*

Nursery Practitioner, Ducklings Nursery

There are a variety of reasons why children may be unable to access these foods at home including financial constraints, limited availability and time pressure on families. Issues of culture and ethnicity may appertain as adults in Black, Asian, Chinese and mixed ethnic groups are less likely to meet the 5-a-day fruit and vegetable recommendation compared to the national average (Office for National Statistics '[Healthy eating of 5-a-day among adults](#)'). Early years settings therefore provide a unique opportunity to address this inequity by creating environments where all children can explore and interact with healthy foods. Through repeated, non-pressured exposure, children acquire familiarity and confidence with foods that they might otherwise reject.

Recent nutritional advice for infants has shifted to emphasise several key areas, one being the advantage of responsive feeding which encourages parents to recognise and respond to their baby’s hunger and fullness cues, with a focus on making feeding experiences positive, regardless of the amount consumed ('[Responsive Feeding Practices to Promote Healthy Diets: A Mixed Method Study among Low-Income Caregivers with Toddlers](#)').

There is also increased emphasis on introducing vegetables at an early stage in the weaning process and on ensuring that babies are offered a diverse diet to make it more likely that they will accept a wider range of foods ('[Vegetables by stealth. An exploratory study investigating the introduction of vegetables in the weaning period](#)'). Another change in advice, supported by new research is the early introduction of allergens such as eggs and peanuts during the weaning process in order to lessen the risk of developing food allergies ('[Study finds peanut consumption in infancy prevents peanut allergy](#)').

Establishing healthy hydration habits is extremely important for young children and early years settings have a pivotal role here in laying the foundation for better health outcomes including reducing the risk of obesity. Making water a child's first choice from an early age helps to embed a lifelong preference for healthier choices.

Settings should not offer foods high in salt and sugar (including sugary puddings) but focus instead on a variety of fruits, vegetables, proteins and some dairy and fortified dairy alternatives. Settings have anecdotally reported that an increased number of children will only eat processed food due to its consistent texture, flavour and shape and many parents/carers are giving their children unhealthy snacks, overloaded by saturated fats and sugar as part of a packed lunch. Smaller settings (in lieu of a nutritionally-trained, on-site chef) may serve commercial snacks that are specifically marketed for infants and young children but as these are often energy dense and high in saturated fat, salt or free sugars, their usage as food for children aged 1-5 years of age (SACN Independent Report (2023) '[SACN annual report 2023 – summary](#)') should be strictly limited.

From September 2025, it is likely that the first wave of nurseries situated in primary schools will result in the existing primary school chef issuing the new nursery with smaller portions of the food that is given to Key Stage 1 and 2 children.

Although food with added sugar and salt meets the current School Food Standards, it is not appropriate for children below five. The Government should therefore adopt a 'whole school' approach to nutrition that broadens the training of chefs employed within primary schools and includes nurseries in Food Standards Agency (FSA) inspections. Local authorities should be funded to supply early years' nutrition training for all settings in their remit, so that at least one member of staff is equipped with the skill and knowledge to provide food that meets government recommendations.

In 2023, London Early Years Foundation (LEYF) commissioned a [qualitative impact report](#) which showed that 96% of chefs that took part in early years culinary training had an improved understanding of the impact of food on children's health and development and 92% of chefs reported an increased understanding of age-appropriate portion sizes.

At present, early years food provision for children lacks the resources and accountability needed to ensure high standards.

Children from lower socioeconomic groups are most at risk of receiving inadequate nutrition and only children who attend school are eligible for a free meal. Children from families eligible for Free School Meals (FSM) do not receive free food if their child attends a childminder or a nursery that is not attached to a school. Children may be eligible for free childcare but parents must pay for food on top of this. Nurseries have reported that some children are missing out on their free nursery provision because parents cannot afford to feed them and send them to the setting either with packed lunches that fail to meet nutritional requirements or with empty lunchboxes in the hope that someone will feed them.

Expanding the entitlement of Free Early Years Meals (FEYM) and ensuring that they are available in all early years settings not just state-maintained ones would help to ensure that

all children from low-income families have access to nutritious food. At a local level, government funded programmes to monitor, evaluate and assess the food on offer at early years settings will also ensure that guidelines are being observed and updated as necessary. Many UK councils run award schemes for excellence and this might encourage childcare settings to evaluate their food offer and where necessary, raise their game.

## CHAPTER FIVE: DENTAL HEALTH, PHYSICAL ACTIVITY AND WELLBEING

Oral health, depicted as the quality of the mouth, teeth and orofacial structures (World Health Organisation WHO (2024) ['Oral Health'](#) Fact Sheet) is a crucial component of early child development as it affects breathing, speaking, eating and psychosocial aspects such as self confidence and the ability to socialise.

It is so inextricably linked with dental health that the terms are frequently used interchangeably and dietary patterns established in early life influence immediate and long-term health and wellbeing. Instigating good nutritional practice from preconception throughout the early years and onwards is therefore essential to mitigate health inequalities, reduce the burden on dental services and improve overall public health.

First teeth start to emerge at around 6 months of age and beneficial dietary patterns should be encouraged in children early on (Department for Education (2024) Early childhood dental care and its role in overall child development. Government Health Report ['Oral Health'](#)). Frequent consumption of sugary foods and drinks will stimulate production of the acids that erode tooth enamel and cause caries (Sustain UK (2024) *'The Impact of Ultra-Processed Foods on Children's Health'*). Recent research suggests that ultra-processed foods may have a negative effect on jaw development leading to malocclusion (misaligned teeth) and other oral health complications (The Guardian (2025) ['Are Ultra-Processed Foods Changing the Shape of Our Jaws?'](#)).

In 2023 The Department for Education (2023) ['Oral health. How to promote good oral health in young children in your setting'](#) found that almost a quarter of 5-year-olds in England had tooth decay, affecting an average of 3-4 teeth and 11% of 3-year-olds had visible tooth decay affecting an average of 3 teeth. Some of the problems caused by untreated dental caries include:

- Pain
- Infections
- Issues with self esteem
- Difficulty in eating
- Disturbed sleep
- Poor communication and socialisation skills
- Irregular levels of weight gain and growth
- Delayed cognitive development.

Any and all of these outcomes can contribute to a child failing to thrive and the foremost of the above which is pain (World Oral Health Index Update (2025) *'Oral health-related quality of life*

*in children: An international perspective*’ World Health Organisation Report) can lead to hospitalisation.

It has been reported that at least 60,000 school days are missed annually by children attending hospital for dental extractions alone with 26% missing an average of 3 days (Office for Health Improvement and Disparities (OHID) (2022) [‘The burden of dental disease in the UK: Key findings’](#) Department of Health and Social Care). The consequent trauma and associated disruption can have a negative impact upon the education and social welfare of the child and the overall wellbeing of their family.

Childhood caries are associated with poorer health in later life (Ruiz B, Broadbent JM et al (2023) [‘Childhood caries is associated with poor health and a faster pace of aging by midlife’](#) J. Public Health Dent) and across the lifespan, poor oral health has been linked with serious diseases including cardiovascular, diabetes, cancers and other adverse outcomes such as premature birth (Seitz MW et al (2019) [‘Current Knowledge on Correlations Between Highly Prevalent Dental Conditions and Chronic Diseases; An Umbrella Review’](#) Prev Chronic Dis).

Diet is largely determined by socioeconomic forces: ultra-processed, high sugar foods are often the cheapest and most accessible options for low-income communities. Deprived areas tend to be more obesogenic, with limited access to sources of fresh produce and a higher density of fast-food outlets. The outcome is that children in these areas consume increased amounts of free sugars; a primary contributor to tooth decay and early childhood caries (Public Health England (2021) [‘Inequalities in Oral Health in England’](#)).

The situation is particularly severe in parts of the UK where entire communities lack access to an NHS dentist, forming ‘dental deserts’ ([British Dental Association](#) (2024) *‘The Funding Crisis in NHS Dentistry’*). Children from these areas may have to travel long distances for care with a consequent economic impact upon the entire family because the parents have no option but to take time out of work to accompany their child. This can be at least 2 days’ absence from work if the child needs dental surgery plus additional recuperation time from the anaesthetic (Public Health England Guidance (2017) [‘Health matters: child dental health’](#)).

A study by the Faculty of Dental Surgery (Royal College of Surgeons (2023) *‘Inequalities in Children’s Oral Health’*) found that children from lower income families are more likely to miss school because of dental issues, to the detriment of their academic performance and future employment prospects. The lack of NHS dental provision exacerbates these challenges with some families unable to afford private treatment and embarking per force upon a pattern of long-term dental neglect over the life span. A systematic review comprising findings from America, Asia and Europe showed that the cumulative effect of persistent oral ill health was to depress wellbeing to the extent of lowering the overall quality of life (Bramantoro T, Hariyani N et al (2020) [‘The impact of oral health on physical fitness; A systematic review’](#)).

Deprivation underlies poor diet and precipitates dental health problems in childhood just as dental health disparities are strongly linked to socioeconomic status. The regular dietary lifestyle of a child from a lower income household is more likely to be characterised by limited

access to fresh foods, increased reliance on processed foods, reduced access to dental care and untreated dental decay.

Lack of parental awareness about the ways in which essential nutrients impact dental health can result in vitamin and mineral deficiencies. Combined with free sugar overload and food insecurity, the end product is a diet high in refined carbohydrates and low in necessary micronutrients. Insufficient amounts of calcium and vitamin D (needed to form dentine and enamel) in maternal and infant diets can cause delayed tooth eruption and hypoplasia increasing susceptibility to tooth decay. Similarly, iron deficiency has been linked to a higher occurrence of oral infections such as candidiasis and ulcers in young children.

Oral health must be embedded firmly within the preconception and early years nutrition framework as a social and economic necessity that is of immense benefit to individuals, families and wider society. As of urgency, the Government should:

- Roll-out water fluoridation nationwide; included within the Health and Care Act (2022) and promoted as a supremely effective public health measure for lessening oral health inequalities and tooth decay especially amongst children (Department of Health and Social Care Policy paper (2022) '[Health and Care Bill: water fluoridation](#)')
- Encourage early dental check ups as advocated by the British Society of Paediatric Dentistry (BSPD) campaign [Dental Check by One](#) to identify potential issues early and establish good oral hygiene habits
- Ensure that all nursery and pre-school nutrition advice includes specific oral health guidelines to support early intervention
- Make oral health training mandatory for all early years educators and healthcare professionals, combined with national roll out of supervised tooth-brushing schemes in early years settings and primary schools
- Promote a public awareness campaign about the link between nutrition and dental health; in particular regarding the harmful effects of sugary and acidic foods
- Combat oral hygiene poverty by putting initiatives in place to provide families with access to oral hygiene products.

Advice to new parents about healthy eating habits should emphasise the importance of nutrition in supporting energy levels and physical activity. Encouraging children to drink water (especially after physical activity) to maintain good hydration and contribute to their overall wellbeing is a practical way in which to illustrate the interrelatedness of nutrition, physical activity and health.

The combination of good nutrition **and** physical activity helps to build a healthy immune system so that risks to such dental areas as gum disease are reduced. Research indicates that periodontal (gum) disease is associated with the emergence of illness in later life including heart disease and diabetes and delaying treatment for it can influence future bone loss (American Dental Association (ADA) (2025) [Oral-Systemic Health](#)).

Similarly, a Romanian study of 173 children showed the benefit of physical activity to oral health (Popa et al (2023) '[Study on the influence of regular physical activity on children's oral health](#)'). A study of adolescents in Finland found that those who were more physically active



had better oral health (Virtanen JI et al (2019) '[Physical activity, BMI and oral behaviour among adolescents: Finnish School Health Promotion Study](#)' European Journal of Public Health) and a systematic review of the impact of oral health on physical fitness revealed links between poor dental and oral health and low physical fitness levels, especially in elderly people (Bramantoro T, Hariyani N et al (2020) '[The impact of oral health on physical fitness: A systematic review](#)').

Early years and primary Physical Education (PE) curricula should therefore be widened to make connections between physical activity, nutrition and oral health so that improvements in overall quality of life and wellbeing throughout the life span can be achieved.

Nutrition is an essential component in the early development of emotional and mental health and wellbeing. A child's brain develops rapidly in the early years and requires a balance of nutrients. [Studies have shown](#) that children who consume a diet rich in omega-three fatty acids (found in fish and some plant-based sources) tend to have sharper cognitive skills and present fewer behavioural issues.

Deficiencies in iron, zinc (found in meat, nuts and dairy produce) and Vitamin D during early childhood have been associated with motor impairment and risks of depression, anxiety and attention deficit/hyperactivity disorder (ADHD). An iron deficit in particular triggers fatigue with adverse impact on concentration levels and the ability to absorb information. Children who consume a diet rich in fruits, vegetables, proteins and whole grains are less likely to undergo mood swings, hyperactivity and anxiety in comparison with children who consume high sugar and processed food diets.

A pioneering study, [How is children's mental health associated with nutrition?](#) led by the University of East Anglia (UEA) Health and Social Care Partners in collaboration with Norfolk County Council uncovered connections between intakes of fruit and vegetables, breakfast and lunch choices and mental wellbeing in UK school children. The research (commissioned by the Public Health Department of Norfolk County Council and the Norfolk Safeguarding Children Board and open to all Norfolk schools in 2017) found that the children who consumed five or more portions of fruit and vegetables per day recorded the highest mental wellbeing scores.

The difference in mental health and wellbeing between children who consumed the most fruits and vegetables compared with those who consumed the lowest amount was on par with children experiencing daily, or almost daily, arguing or violence in the home. UEA Professor Ailsa Welch said:

*'There is a growing recognition of the importance of mental health and wellbeing in early life.....while the links between nutrition and physical health are well understood, until now, not much has been known about whether nutrition plays a part in children's emotional wellbeing...as a potentially modifiable factor at an individual and societal level, nutrition represents an important public health target for strategies to address childhood mental wellbeing.'*

The family is the context in which infant and early years feeding occurs and this includes mealtime atmosphere as well as dietary content. Government should therefore invest in nutrition education for the adults in a family and community-based nutritional programmes designed to advise and support them. This could improve physical and mental outcomes for children. ‘Responsive’ feeding (as discussed earlier) is a way in which feeding can be enabled to flourish from the earliest days instead of becoming the trigger for an accumulation of stress and tension that can envelop a family at every mealtime.

In early years settings, sensory food education is a way in which to foster children’s overall emotional and social wellbeing. Talking about food items as belonging to historically ‘good’ or ‘bad’ categories may instil feelings of guilt and fear even at a very young age (The British Heart Foundation (2022) [‘Good foods, bad foods’](#)) whereas sensory food education focuses on individual exploration, enjoyment, choice and autonomous personal preference.

TastEd activities involve mindfulness and sensory engagement; helping children to explore items calmly at their own pace and sensory food education aims to improve dietary habits whilst nurturing resilience and emotional wellbeing. In order to create a positive feeding atmosphere for children, parents should be able to access support for their own mental health. Children with special educational needs or a diagnosis (such as autism) may find the process of eating difficult and stressful and the parents and caregivers should be enabled to access help so that they can feel confident in their own ability to provide optimum support for their child.

Affording access to nutritious foods for children in early life gives a future generation the best chance of living with good health and emotional stability. If sources of support are put in place for a child **and** their family, children will learn healthy eating habits and develop mental and emotional resilience in a collective environment in which they are enabled to be happy and thrive.

## **CHAPTER SIX: CASE STUDIES**

The case studies below demonstrate the importance of early years nutrition as an essential component of lifelong health and wellbeing

### **HENRY: Supporting a second-time mum with breastfeeding challenges**

The Health, Exercise and Nutrition for the Really Young programme (HENRY) helps parents to adopt healthier eating and lifestyle habits for the benefit of the whole family. Here, a frustrated and anxious second-time mum emailed HENRY because she was struggling to breastfeed her ten-day-old second child. She had breastfed her first (albeit with difficulty) for nine months and thought that ‘second time around’ it would be easier. However, the baby did not ‘latch on’ securely and she was now part-breast, part-bottle feeding and expressing milk with a pump. She felt exhausted and alone.

A HENRY practitioner visited her home and this made the mum feel valued. The practitioner helped her to use the breast pump efficiently and pace bottle feeding to ease the baby’s



transition to breastfeeding while preventing over-feeding. The mum confided that a Health Visitor had suggested that a difficulty in latching on **could** be due to tongue-tie (ankyloglossia). As the days passed, this was reviewed, the tongue-tie corrected and, working with the practitioner, the mum felt confident in feeding her baby post-procedure.

The HENRY practitioner's support enabled an anxious mum to persevere with breast feeding. She moved gradually to exclusive breastfeeding and had more energy to focus on her older child and the family unit. HENRY's bespoke and in-person guidance enabled a mum to regain confidence in her ability to feed her baby and parent her children:

*'(The HENRY practitioner) has been a great support, sending me lots of info and helping me with breastfeeding positions during a home visit. She has kept in touch throughout and made me feel like I could reach out for help at any time. What a great service HENRY is. Thank you.'*

### **TastEd: Implementing sensory food education in Early Years Settings**

The TastEd charity supplies early years settings with free training and practical resources. Children familiarise themselves with fruit and vegetables via sensory exploration and undertake activities propelled by their own natural curiosity. They build confidence around foods that might not be part of their daily diet and the aim is for them to develop healthier eating preferences with no pressure to either like or eat the foods. TastEd's methodology is recommended to practitioners on the Department for Education's 'Help for Early Years Educators' website (Department for Education (2023) ['Sensory Food Education'](#)).

#### Embedding sensory food education at a Local Authority Level

TastEd's partnership with Brighton and Hove City Council integrates sensory food activities into the routines of early years settings across the local authority. To date, 1,000 children have been reached and positive outcomes reported by practitioners include:

- Children's increased confidence around food shown by a willingness to investigate different fruits and vegetables in the sessions
- Less fraught mealtimes; children explore the foods without pressure to eat them
- Parents reporting the enthusiastic sharing at home of TastEd recipes and materials
- Children using more expressive and complex language when talking about food due to the TastEd sessions.

The partnership's next target is to expand by covering more settings; particularly in areas of deprivation.

#### Sensory food education at an individual nursery level

Lincoln's Portland Kindergarten champions sensory food education. Since 2021, this setting has run at least one weekly TastEd session and practitioners have noticed a significant upturn in the children's readiness to try new foods. They find the training resources to be accessible and capable of blending into established practice and Portland supports a county-wide TastEd roll-out; using a slot on BBC Radio 4's 'The Food Programme' to call for other

nurseries to join them in adopting sensory food education (['Learning to Eat Part 1 – Do Kids Need Special Food?'](#) BBC Sounds).

*'We started 18 months ago, we didn't know how the children would take to it, but actually they've embraced it more than we could ever have imagined.'*

Melanie, Nursery Owner

*'TastEd has at least given our children...the opportunity to try (the fruit and vegetables) if they want to.'*

Mia, Nursery Manager

## **Nourishing our future: a research project studying the early years food environment in Essex**

['Nourishing our Future'](#) was a project of six months' duration, commissioned by Essex County Council and led by early years and nutrition experts at Anglia Ruskin University. Food provision, environment and practitioner and parental experiences and perceptions towards healthy eating for children were studied in private, voluntary and independent (PVI) settings across the 12 Essex districts.

The overall population of Essex exceeds 1.5 million residents with 42,931 children in 2023 attending early years settings. The health and financial profile of the county is diverse and Basildon and Jaywick are two of the most economically-deprived areas in England. Children living with obesity or overweight in Essex increased from 9.2% in 2022/23 to 9.6% in 2023/24 (NHS (2024) [National Child Measurement Programme, England](#)) and one parent interviewed by project researchers accounted for the attraction of cheap, processed, obesogenic food by saying: *'If healthy food was cheaper, more people would be encouraged to buy.'*

Children are thought to consume 90% of their daily nutrient intake in early years settings (Early Start (2024) ['Prioritising Nutrition in Your Early Years Setting'](#)). 'Nourishing our Future' identified three priority areas as: type of setting (day, nursery, childminder or pre-school), area of deprivation (measured by the income deprivation affecting children and an age range of 1-5 years) and method of data collection including photographic and online data and telephone interviews. Project findings are below:

### Recommendations and guidance

- 160 settings had food policies and 97 produced written menus, broadly updated on an annual basis
- Only 41% of settings used the *'Eat Better Start Better'* voluntary guidance because it was not user-friendly and sample recipes were insufficiently inclusive for large numbers of children.

### Nutrition and portion size

- 44% of settings used national guidelines for age-appropriate portion sizes and 49% considered their menu to be guideline-compliant

- 25 sample menus from settings showed high adherence to carbohydrate, fruit and vegetable recommendations but insufficient in fish and protein-compliance
- Childminders were confronted with lunchboxes containing an abundance of processed food; high in sugar and additives.

#### Food environment

- 40% of children brought food from home
- Kitchen facilities varied significantly across the type of setting
- Practitioners viewed mealtimes as opportunities in which to encourage healthy eating habits and share attitudes to food
- A 'food environment' encompassed the local community and children's engagement with the wider food environment.

#### Food inclusivity

- Centres encountered difficulty in navigating the complexities involved in feeding children with special educational needs or disability (SEND) allergies and intolerances
- Rising food costs and the pervasive marketing influence of convenience and processed food inhibited the prioritisation of fresh and nutritious options
- Parents' involvement by 'sharing their culture and offering food tasting to children' contributed to the atmosphere of inclusivity in pre-school settings.

#### Food education

- Practitioners showcased valuable educational experiences embedded into daily practice and mealtime routines to support children's food education; a core responsibility of early years provision
- Practitioners identified a need for additional support to improve their work with parents in the interests of a 'joined-up' approach to children's food education
- More opportunities for training and networking were needed in order to discuss healthy eating and share good practice.

#### Food sustainability

- Practitioners showed growing concern about food waste and excessive packaging (taken from photographs gathered as part of the '*Typical Day on Our plate*' activity).

In response to the aims and objectives of 'Nourishing our Future', practitioners identified areas of policy and practice to be addressed in order to improve the lifelong health and developmental trajectory of the youngest children. Settings struggled to provide wholesome food for the children due to rising costs of healthy and sustainable food (*'It's crazy to think that a packet of crisps is cheaper to buy than an avocado'*). Approximately 80% of settings surveyed either did not charge parents for food (48%) or only requested an optional charge (37%).

**There is currently no government funding available to offset the cost to settings of providing healthy food for children.**

Healthy eating policies and practices should be informed by clear, creative and accessible guidance and local networks can provide invaluable opportunities to increase the knowledge of practitioners and parents and support them in matters such as dietary requirements and sustainable practice. Different settings have a range of needs and in order to develop high quality, innovative practice in food provision and education it is necessary to acquire a deeper knowledge of their complexity.

Parents must also be supported at national level beyond the first year of their child's life if the critical objective of embedding healthy lifelong eating habits in early childhood is to be achieved. This should operate in tandem with a reduction in targeted marketing and the saturation of unhealthy, highly processed foods so that practitioners, parents and children are afforded the freedom to operate and gain confidence within a healthy food environment.

#### Locally-based strategies

Addressing nutritional and dental needs in early years settings require a multi-layered response. Provision in towns and cities is often under scrutiny, but rural areas experience unique challenges, including limited access to NHS dental care, fewer public health initiatives and lower availability of nutritious food options.

#### Mobile dental clinics: Community Dental Services (CDS) Community Interest Company (CIC)

Early intervention is extremely important to maintain good oral health and Community Dental Services (CDS) CIC [operates mobile dental units across underserved areas](#) so that children (particularly in deprived communities) can receive preventative dental care. The units call on schools, nurseries and community centres offering services such as fluoride varnish application, dental checks and oral health education. Children in rural regions may live in 'dental deserts' lacking access to dental services and the clinics have reduced the incidence of untreated tooth decay and consequent hospital admission.

Recognising the higher prevalence of tooth decay among children in rural areas, the UK government introduced supervised tooth brushing initiatives in some nurseries and primary schools with staff trained to guide young children in effective brushing techniques and good oral hygiene practice. A Public Health England report found that the participants experienced a 30% reduction in cavity rates compared to others (Public Health England (2023) [‘Supervised Tooth brushing and Child Oral Health’](#)).

#### Health visiting teams (HVTs) in rural areas

Health visitors are well positioned to offer critical early intervention support for families and this is especially important in isolated rural areas. Health visiting teams (HVTs) offer home visits, community clinics and targeted outreach programmes focused on early years nutrition and dental health. They educate parents and carers about various aspects of child health and wellbeing including the adverse effects of sugar consumption, and the importance of

balanced diets. HVTs are on hand to advise about breastfeeding and arrange early dental check-ups.

Increasing the availability of health visiting services in rural areas could speed the detection of dental and nutritional problems and lessen the likelihood of precipitating more severe health consequences in later childhood (NHS England (2023) [‘The NHS Long Term Plan and Early Years Health’](#)). Increasing investment in HVTs has been recommended as a policy priority in the interests of ensuring equitable early years health outcomes.

#### Local authority nutrition workshops for early years settings

Introducing nutrition education into early childhood settings helps to build sustainable and lasting dietary habits for children in the interests of their long-term health and wellbeing. Some local authorities run nutrition workshops for early years settings in response to mounting concern about the causes of childhood obesity. The workshops have focused on reducing sugar intake, understanding food labelling and making cost-effective and nutritious food choices. An evaluation of workshops in Devon and Cornwall found that sector participants reported a 40% increase in children’s consumption of fresh fruits and vegetables (Devon County Council, 2024). The workshops also offered training in the preparation of balanced and nutritious meals in childcare settings.

Well-structured local initiatives can make a strong contribution to the eradication of health inequalities. Future policy recommendations should therefore aim to scale up existing proven interventions, increase funding for rural dental and nutrition initiatives and embed health considerations into local decision making at all levels.

## **CHAPTER SEVEN: COMPARATIVE PRACTICE FROM THE DEVOLVED UK AND OTHER COUNTRIES**

Comparing early years nutrition policies in the devolved UK with international models reveals a variety of ways in which to approach oral health and nutrition strategy for the youngest children. There is compelling evidence that addressing them together within an early years framework would significantly reduce the incidence of dental caries and lay a strong foundation for lifelong physical and mental health and wellbeing.

### **Scotland**

Scotland’s early years food provision guidance is aimed at a primary audience of providers and practitioners (including childminders) delivering funded and paid for early learning and childcare (ELC). The Scottish Government guidance (2024) [‘Setting the Table: Nutritional Standards and Practical guidance for Early Learning and Childcare Providers in Scotland’](#) is regularly updated by expert stakeholders and informed by the [‘Scottish Dietary Goals’](#) and the [‘SACN Report on Feeding young children aged 1 to 5 years’](#) and the [‘SACN Carbohydrates and Health Report’](#). The implementation of the most recent standards will be from August 2025.

There are 14 Setting the Table (STT) nutritional standards with a strong focus on fat, salt and sugar reduction and an increased provision of fruit, vegetables and fibre. The guidance is shorter and easier to follow and signposts the reader to relevant sector documents.

The guidance is not statutory, but its prominent recommendations are considered to be a crucial component of the Care Inspector's visits to settings when providers will be expected to **be seen to be** implementing them. They are closely linked with the regulated health and social care standards (HSCS) and other related policy in Scotland. STT follows a similar approach to the Scottish Government's parallel guidance for schools and necessary updates such as the increase in access to fruit and vegetables and reduced access to sugar are present in both. Where a setting caters for early years **and** school-aged children, the expectation is that the more stringent standard will be in place if it is not practical to have separate provision.

A review of school meal standards and more robust regulation would help to ensure that an improvement in children's eating habits in the early years is sustained thereafter; continuing through school and longer term into adulthood. Providers would welcome additional support in the implementation of the standards, including comprehensive training for all staff (specifically, catering teams) to ensure that the initial implementation is successful and that the continuous updating of menus, introduction of new staff and opening of new settings are managed smoothly and efficiently.

In addition to STT guidance, Scotland's [Childsmile](#) programme is a preventative model combining supervised tooth brushing with dietary interventions. It supplies free fluoride varnish applications, oral health packs and parental education, leading to a measurable decline in childhood caries rates (Macpherson LMD, Anopa Y et al (2019) '*Childsmile: The National Child Oral Health Improvement Programme in Scotland*' British Dental Journal 227(2) pp. 202-207). Childsmile is designed to address oral health inequalities through the placement of support workers in the more disadvantaged communities and offering families with young children home-based support with oral health. Working with the local community, Childsmile maps services that can support families from a range of areas including:

- Foodbanks
- Welfare
- Parent/baby groups
- Nutrition
- Community family support
- Dedicated ethnic minority services.

### **Northern Ireland**

The [National Dental Epidemiology Oral Health Survey in Northern Ireland](#) revealed that by the time a child has reached age 5, their dental trajectory has been set with the prevalence and severity of dental decay varying in direct relation to the level of deprivation. Children from more deprived areas showed a 45.2% prevalence of decay compared to children from the least deprived areas at 16.2%. The [Northern Ireland Children's Oral Health Improvement Plan](#) (2023) developed with the Children's Oral Health Options Group outlined four trajectories to

better oral health for children: - improving the oral and dental health of children; general anaesthetic dental provision for children; utilising the skills of the dental team and empowering families).

## **Ireland**

Children's Health Ireland adopt a multidisciplinary approach to [paediatric dental services](#); relying on community-based dentists for the treatment of most children and offering individualised consultant-led service treatment for children with complex dental needs.

## **Wales**

The Welsh Government has promoted a multifaceted approach to influence the 'wider determinants' of health and oral health inequalities. Citing evidence from the [Dental Epidemiology Programme for Wales](#), oral health inequalities were found to exist from as early as three years of age, where children could suffer from pain and infection, disturbed sleep, impaired ability to focus, reduced dietary variety, barriers in speech development and acquisition of negative self image and poor mental health.

## **Finland**

In Finland municipal preschools are required by law to serve meals that meet the nutritional needs of children as outlined in the Act on 'Early Childhood Education and Care'. The National Core Curriculum for Early Childhood Education and Care also emphasises the importance of healthy food and nutrition in early years settings. The approach engages with all five senses to help children to explore and become familiar with a wide variety of foods, fostering lifelong healthy eating habits:

*'The aim of food education is to promote positive attitudes towards food and eating and support versatile and healthy eating habits...Children familiarise themselves with foods, their origins, visual appearance, textures, and tastes through the use of different senses and exploration.'*

Finnish National Agency for Education (2022)

National core curriculum for early childhood education and care

'Tasty School' is an initiative designed by [Ruukku](#) with the aim of integrating food education into primary schools. Building on the ECHC curriculum, Tasty School incorporates food into various subjects and daily school life in order to create a culture of 'food joy' while reinforcing sustainable and healthy eating habits. The project is funded by the Ministry of Social Affairs and Health and has received a positive evaluation (Kähkönen K, Talvia S et al (2022) ['Implementation of food education in school environments improves pupil eating patterns and social participation in school dining'](#) Public Health Nutrition).

Beyond Europe, other international initiatives demonstrate the value of integrating oral health into early years nutrition strategy.

## **South Africa**

South Africa's paediatric food-based dietary guidelines (PFBN) make a direct link between nutrition and oral health and recommend regular oral health care for infants, transitioning from bottles to cups and limiting sugary treats to mealtimes. The guideline gives a framework for intervention that addresses both dietary habits and oral hygiene (Vorster HH et al (2013) '*An introduction to the revised food-based dietary guidelines for South Africa*' South African Journal of Clinical Nutrition, 26(3) pp. S1-S164).

## **Japan**

Japan has prioritised maternal/child health policy integration starting in pregnancy when expectant mothers receive oral health checks and guidance and proceeding to a family-based programme of oral care whereby parents are encouraged to model good teeth brushing habits. As an outcome, a lower level of cariogenic bacteria is transmitted to infants, reducing the risk of decay.

## **Kuwait**

The School Oral Health Program (SOHP) is a collaborative initiative between the Forsyth Institute and Kuwait's Ministry of Health. It offers preventative services, oral health education and curative treatments for schoolchildren. The programme integrates good nutrition and oral hygiene practices with routine dental visits leading to the beneficial outcome of improved oral health outcomes among participants (Ariga J et al (2014) '[School Oral Health Program in Kuwait](#)' Medical Principles and Practice pp. 43-46).

## **UK Government**

On 17 April 2025, the UK Government published a revised [Early Years Foundation Stage nutrition guidance](#). Providers and sector leaders in the UK have long called for the adoption of a more comprehensive framework for early years settings that embeds dietary and nutrition guidance with oral health education. The case has been made for evidence-based preventative care; reinforcing national programmes with legislative measures that support healthier dietary and oral hygiene habits from infancy and afford all children the best chance of lifelong health and wellbeing.

The 2025 revised guidance is operational from September 2025, following a consultation on proposals to strengthen the Early Years Foundation Stage (EYFS) safeguarding reforms. From the 1470 responses received there was strong support for the changes.

Issues included in the new guidance are:

- Nutrition from birth until 1 year with a focus on responsive feeding
- Menu planning and portion size
- Interpreting labels
- Allergies, intolerances, food for religious faiths and beliefs
- Mealtimes: best practice



- Communication with parents and carers
- Food safety and hygiene; food brought from home (packed meals)
- Healthy and cost-effective food
- Children with extra support needs and special dietary requirements
- Food activities and ideas for snacks.

However, despite the fact that these are welcome changes, the additional expense of implementing them will be yet another seemingly insurmountable burden to settings already facing individual and collective funding crises to the extent of having to reduce staff numbers. In addition, despite the improvement in content, the UK Early Years Foundation Stage nutrition guidance is still not mandatory. Providers will be required to ‘have regard to’ the new guidance meaning that it must be taken into account and should be followed unless there is good reason not to.

This is about as forceful as **voluntary** guidance can be – but it is still voluntary and while that remains the case, some children will inevitably ‘slip through the net’ and deeply-rooted inequities in the health and wellbeing of the UK’s youngest children will continue to exist.

## CHAPTER EIGHT: THE WAY FORWARD

The primacy of the early years in the long-term health and development of children is now a given, but governments continue to sidestep the role of nutrition within that time span. Providers, practitioners and parents have become accustomed to a constant state of flux where inconsistency is rife and the only certainty is that of under funding. At the same time, the damage to the economy of chronic illness and disease has caused prevention to loom large amidst strategies to improve the health and wellbeing of the population. **It is within that context that the time has come to prioritise the role of nutrition in the earliest years of children’s lives.**

Mandatory nutrition composition standards for commercial baby and toddler food and drink products

Commercial products aimed at young children are both trusted and popular with parents yet their nutritional profile frequently falls short of public health guidance. The Conservative Government’s green paper '[Advancing our health: prevention in the 2020s](#)' - consultation document and subsequent consultation on compositional guidelines for commercial food and drink targeted at <36 month-olds (Public Health England (2020) '[Draft Proposals: Commercial baby food and drink guidelines](#)') had only voluntary status and were not succeeded by finalised guidance.

Mandatory guidelines would protect children’s health whilst ensuring that *all* companies (not just the responsible few) work towards the same goals.

In the interests of independence, despite their status as key stakeholders in the food business, commercial concerns should not be included in guideline or threshold consultation exercises (World Health Organisation (2022) '[Nutrient and promotion profile model](#):'

[supporting appropriate promotion of food products for infants and children 6-36 months in the WHO European Region](#)’).

#### Mandatory marketing and labelling standards for commercial baby and toddler food and drink products

Children are currently growing up in an obesogenic environment; engulfed by the unscrupulous promotion of unhealthy foods high in fat, salt and sugar (HFSS). The Food Data Transparency Partnership (FDTP) launched in 2023 is a [partnership between government, industry, academic and civil concerns](#) designed to report on data of relevance to improving the environmental and health impacts of food products.

This not **statutory** provision and the Government should now issue a consistent set of metrics to enable health-based mandatory reporting for businesses selling food and drink products in the UK. External publication would facilitate government and public scrutiny of progress made towards healthier food products (in particular, those directed at children) whilst adding impetus to product reformulation.

In addition, the absence of guidelines for the marketing and labelling of commercial baby and toddler food and drink products has encouraged elements of the food industry to manipulate parent choice via the ‘smart’ marketing of erroneous claims about product ‘healthiness’ (Neve K L et al (2024) [‘What shapes parental feeding decisions over the first 18 months of parenting: insights into drivers towards commercial and home-prepared foods among different socioeconomic groups in the UK’](#)). This is called ‘halo’ marketing.

Action on Sugar (based at Queen Mary University of London) collaborated with The Food Foundation on the report [‘The Broken Plate 2023’](#) in the section [‘Marketing of baby and toddler snacks’](#) found that 97% of 102 baby and toddler snacks, collected between October 2022 and January 2023 contained a nutrition or health claim on the front of pack, with only 18% classified as low in sugar, defined by an adult’s maximum total sugars recommendation. 36% were found to provide half of the maximum recommended sugars intake for a 2-year-old in a single serve.

A year later, 136 snacks were all found to contain a health, nutrition or marketing claim as defined by the WHO Nutrient Promotion Profile Model, making a total of 759 claims just on the front of pack. Only 26% of the products were found to be low in sugars according to the same guidance (The Food Foundation’s [Broken Plate Report 2025](#) in the section ‘Marketing of baby and toddler snacks’).

A study conducted by the University of Leeds School of Food Science and Nutrition and financed by Which? examined 632 food products specifically marketed for babies and toddlers under the age of three. [‘Commercial Baby Foods in Crisis’](#) evaluated the products for nutrition and on-pack marketing and gathered views from over 1,000 parents via focus groups and a nationally representative survey. The project was featured in a BBC Panorama programme and the UK baby food market was found to be swamped by products of a low nutritional quality, successfully disguised by erroneous on-pack halo messaging. Sue Davies, Head of Food Policy at Which? said:

*‘The Government urgently needs to update the out-of-date laws for commercial baby foods to ensure that there are tighter controls on their composition – including limits on their sugar and salt content – make labelling clear and upfront and clamp down on any misleading marketing claims that suggest products are healthier than they really are.’*

In order to afford children the best start in life, the Government should institute a consultation as of urgency prior to the issuing of mandatory marketing and labelling standards as above.

#### Inclusion of baby and toddler commercial food and drink products in the placement, price and advertisement restriction regulations

The Government’s decision to enforce current and forthcoming policies restricting the advertisement, promotion and placement of food and drink high in fat, salt and sugar (HFSS) is welcome, as is the consultation on [strengthening the soft drinks industry levy](#). However, application of the guidance is reliant on the ‘discretion’ of enforcement agencies with no guarantee that products for babies and toddlers will be included. It is therefore essential that mandatory initiatives are put in place so that the youngest children are securely protected from nutritionally inappropriate products representing potential health hazards.

#### Targeted investment for research

Oral health in particular has seen advancements in microbiome research illuminating the complex interplay of diet, oral bacteria and risk of caries (Simón-Soro A & Mira A (2015) [‘Solving the etiology of dental caries’](#) Trends in Microbiology pp 76-82). Similarly, Artificial Intelligence (AI) applications are proving to be valuable tools in dietary pattern analysis, giving credence to the eventuality of personalised prevention strategies (Schwendicke F et al (2020) [‘Artificial intelligence in dentistry: Chances and challenges’](#) Journal of Dental Research pp 769-774) and genetic research on taste preferences has shortened the odds on tailored dietary interventions becoming a way in which to encourage younger children to make healthier food choices (Feeney E et al (2011) [‘Genetic variation in taste perception: Does it have a role in healthy eating?’](#) Proceedings of the Nutrition Society pp 135-143). These are just some ways in which targeted investment in oral and dental research makes sound economic and health sense, decreasing the inevitability of facing the financial, physical and psychological costs of prolonged treatment throughout the life course.

#### Improved access to nutrition training and resources for early years staff

There is no requirement for staff in early years settings to be trained in nutrition or mealtime best practice. As a consequence:

*‘Food shopping is often done by the nursery managers. They recognise that they’re not actually in the best position to work out what is balanced, what is nutritious, but it falls to them because there is no one else better placed to do it. It’s overwhelming and it seems unfair that they are expected to deliver this, with just one vague line in the EYFS to follow.’*

Michael Freestone, Early Years Alliance

Sensitive issues such as the content of ‘meals brought from home’ or packed lunches, special diets and interaction with parents and carers about children’s food requirements can be fraught with difficulty:

*‘And it’s not just packed **lunches**, is it? It’s packed food for a whole day! We’re asking parents to provide a healthy breakfast, a healthy snack, a healthy afternoon snack and a tea --- all while ensuring variety, balance and safety. That’s a huge responsibility for parents and there’s no support or guidance to help them.’*

Ruth Pimentel, Kindred

Training in food and nutrition must become a component of early years qualifications to ensure that every practitioner:

- Is competent in balanced nutrition, feeding practices and sustainability
- Can access clear, user-friendly tools with which to deliver high-quality meals and positive mealtime environments
- Is confident in supporting children’s diverse food needs including special dietary requirements and allergies, SEND requirements, weaning and cultural food traditions
- Recognises the importance of food education; learning how a child’s early experiences with food can shape their future relationship with it.

Early years settings should also have the opportunity to appoint a Food and Nutrition Lead with a wider remit to include:

- Oversight of menu planning; aligning local practice with national standards
- Supporting parents and staff to improve children’s early food experiences and building a positive relationship with food for the children at the setting
- Embedding best practice around mealtimes, food education and sustainability.

Introduce mandatory, practical food standards for all early years settings

*‘They have to be mandatory, or it won’t happen.’*

Sarah Steel, Founder of the Old Station Nursery Group

The quality of food provision in early years settings has been variable in the absence of a statutory framework to ensure that all children receive nutritionally balanced meals. The recently published new guidance on nutrition in the Early Years Foundation Stage (EYFS) represents an improvement as stated above; there is widespread sector agreement on content and the EYFS as the appropriate place for nutrition guidance.

However, despite the fact that settings should follow the guidance unless there is ‘good reason’ not to do so, food provision for children in reception class at primary school and onwards is protected by statutory regulation and food provision in early years settings is not. Mandatory standards for food provision in early years settings would ensure that nutrition is treated with the same importance as early education itself.

Targeted funding to support high quality nutrition in early years settings

The allocated funding of many settings does not run to the cost of food provision; forcing them to foot the bills themselves or hand down to parents many of whom simply cannot afford to pay extra for food.

*‘If the government is going to fund children’s time in early education but families can’t afford meals that meet nutritional standards, there must be proper funding for it. We can’t have a situation where the government funds early years provision and then turns a blind eye to the food.’*

Jonathan Player, Managing Director of Seymour House and Nursery Kitchen

However, free school meals are funded for **all** children in England for the first three years of primary school. Successive governments continue to bypass food provision in early years settings, thus operating a double standard:

*‘The government has put a strong emphasis on free school meals in primary schools, recognising their role in supporting children’s health and learning. But in early years, food is completely overlooked. I’d welcome a response from the Government and the DfE on why this sector is treated differently.’*

Yusuf Huseyin, Head of Food at N Family Club

The obvious solution to the financial crisis enveloping the provision of nutritious food in early years settings is to extend free school meals (FSM) to the early years sector so that families only need to register once for FSM eligibility. This would:

- Remove financial barriers for low-income families
- Ensure that all children in funded nursery places receive nutritious meals
- Create a seamless transition between early years and primary school food provision and improve uptake of free school meals in primary schools.

The early years sector finds itself at a critical crossroads when it comes to provision of food for the children in its care. Despite its vital role in shaping children’s health and development, nutrition remains under-prioritised, inconsistently applied and under-funded. The recommendations below arise from and build on existing expertise and best practice while ensuring that parents, families and early years settings are supported rather than burdened. Every child should receive nutritious, high-quality food; regardless of where they are born or whatever setting they attend. The Government has a unique opportunity to act now. If we invest in the nutrition of our youngest children today, we will build a healthier and more resilient next generation.

**The early years sector is up for the challenge. Is the Government?**

**Recommendations:**

- 1. Introduce a national nutrition strategy for preconception, pregnancy and post-natal periods, including professional training and expanded access to schemes like Healthy Start to reduce health inequalities for children and families**
- 2. Introduction of mandatory nutrition composition standards for commercial baby and toddler food and drink products**
- 3. Introduction of mandatory marketing and labelling standards for commercial baby and toddler food and drink products**
- 4. Inclusion of baby and toddler commercial food and drink products in the placement, price and advertisement regulation restrictions**
- 5. Targeted investment for the purposes of research**
- 6. Improved access to training and resources for early years staff to support the implementation of the new EYFS nutrition guidance**
- 7. Introduction of a consistent and practical system for monitoring and assessing adherence to the nutrition standards in early years settings**
- 8. Extension of free school meals (FSM) to early years settings**
- 9. Make oral health training mandatory for all early years educators and healthcare professionals, combined with national roll out of supervised tooth-brushing schemes in early years settings and primary schools.**