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To cite this article: Emily Warren, Lorraine Williams & Cécile Knai (2022): The “Cinderella sector”: The challenges of promoting food and nutrition for young children in early years’ settings in England, *Ecology of Food and Nutrition*, DOI: [10.1080/03670244.2022.2073353](https://doi.org/10.1080/03670244.2022.2073353)

To link to this article: <https://doi.org/10.1080/03670244.2022.2073353>



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Published online: 17 May 2022.



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The “Cinderella sector”: The challenges of promoting food and nutrition for young children in early years’ settings in England

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ABSTRACT

The quality of food that children eat in early childhood has profound impacts on their future wellbeing. In England, many children eat the majority of meals in early years’ settings including nurseries and childminders. We conducted 16 interviews with 18 stakeholders exploring food provision, the use of voluntary nutrition guidelines, and the effects of government support on the early years’ sector. Key themes emerging from our thematic analysis included feeling insufficiently consulted, undervalued, support being unequally distributed, needing to fill multiple support roles for families, disagreement about the role and effect of voluntary nutrition standards, and being chronically underfunded.

KEYWORDS

Child care; early year; england; nutrition; dietary guidelines

Introduction

Providing young children with nutritious food is vital for their well-being, setting the stage for healthy development and adulthood (Herman et al. 2014; Mitchell et al. 2015; World Health Organization 2019). At no other time is human development more crucial than while in utero and during the first years of life (Cusick and Georgieff 2016; Herman et al. 2014; Darnton-Hill, Nishida, and James 2004). It is also a time during which disparities, inequities, and the burden of disease attributable to diet can be reduced, with fewer and less intensive interventions, by ensuring that babies and young children have access to the resources they need to develop healthily (Lock et al. 2005). For example, micronutrient deficiencies in early childhood have adverse effects on neurological, cognitive, social, and behavioral development, leading to long-term health conditions, including diabetes and asthma, (Beard 2003; Eckhardt 2006; Huh and Gordon 2008) all of which are less expensive to prevent than to treat. Recent analysis of 2,336 children’s diets in the UK found that children were often deficient in iron and vitamin D, despite many receiving supplementation, and commonly exceeded dietary reference values for energy and

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protein; increasing their risk of obesity (Syrad et al. 2016), a costly burden on the NHS (Allender and Rayner 2007; Rayner and Scarborough 2005; Scarborough et al. 2011). Moreover, the impact of good nutrition is not limited to those who consume it: proper nutrition in early childhood enables better health during reproductive years, and has been shown to improve generational wellbeing (Martorell and Zongrone 2012).

There is growing acknowledgment of the important role of early years settings (EYS), such as nurseries and childminders, in meeting key public health objectives, including reducing obesity and its related morbidities, and enabling and encouraging physically active play, which is crucial for mental wellbeing and physical health and development (Larson et al. 2011; Osei-Assibey et al. 2012). In England, from the age of three all children are eligible for at least 15 hours per week (during term time) of free childcare. Working parents of 3–4-year-olds may be eligible for an additional 15 hours. This provision excludes the costs of consumables, including food (Government, HM 2017a). In 2019, 76% of all children aged 0–4 years had some form of childcare in the previous term-time week, with marked increases by age (Department for Education 2019). Relative to the median full-time earning for women, the UK has the most expensive childcare system in the Organization for Economic Co-operation and Development (OECD a group of 38 participant countries), making it difficult for many families to afford, despite government assistance (OECD 2020). If a child attends a setting full-time, the standard setting will serve breakfast, a main meal at lunch, a light meal as tea, as well snacks in the morning and afternoon. Therefore, on a day when they are at the setting, 90% of a child's energy and nutrient requirements would likely be served at the setting, with 10% served at home (Mucavele, Wall, and Whiting 2020).

EYS in England are monitored and evaluated by the Office for Standards in Education, Children's Service and Skills (Ofsted) through the Early Years Foundation Stage Framework (EYFS) which includes a welfare requirement that EYS provide food and drink that are "healthy, balanced, and nutritious" (Ofsted 2019, 2015). Despite this requirement, there are no mandatory standards against which food and drinks are assessed. Currently, there are two sets of national guidelines for children in EYS, although both are voluntary (Action for Children 2017; Government 2017b). In addition, a range of external or independent food award schemes are available for EYS, for example Healthy Choice Awards, Food for Life, and Healthy Early Years London awards. Each award has levels that settings can achieve based on their food provision and practices. Settings are able to determine if children are allowed to bring in food from home or whether or not they may only eat food provided by the setting. Evidence from primary and secondary schools in Britain is clear that meals provided by schools are healthier than packed lunches brought

from home (Evans et al. 2010, 2020; Sabinsky et al. 2019; Stevens et al. 2013). In primary schools, children who ate packed lunches consumed significantly more calories, sugar, fat, and salt than children who ate meals provided through the school (Evans et al. 2010). Evidence comparing the nutritional quality of packed and setting-provided foods in EYS is rare (Children's Food Trust 2016; Lucas 2017).

In England, a wide range of individuals and groups are responsible for enabling and promoting healthy eating and development of young children. These include EYS themselves, national and local government bodies, healthcare providers, executive agencies such as Ofsted and the Food Standards Agency, member organizations (MO), charities, and research centers, among others. While a body of evidence around the relationship between mainstream schools, families, and communities (Epstein 2010; Goldthorpe et al. 2019) exists, less is known about how this works for pre-school aged children, and how these different groups work together or separately on issues affecting younger children, especially in relation to food and healthy eating.

Currently, in the UK, there are multiple programmes and initiatives which are aimed to support the healthy development of young children, although gaps between policy and practice have been documented (Marmot 2020). Health visitors (HVs) are nurses and/or midwives with additional training in community public health nursing. They provide universal (not means-tested) support to families from early in the post-natal period, to when the child is 5 years old via home visits or community meetings, to address maternal, child, and family health needs (Cowley et al. 2007). Economically deprived pregnant women and families with children under four years old may be eligible for Healthy Start, an initiative that provides vouchers for fruit, vegetables, milk, and vitamins (Lucas, Jessiman, and Cameron 2015). Sure Start is a UK-wide programme intended to support children under four years old and their families. This involves the provision of children centers; enhanced work with health visitors; and other health promoting interventions such as support for breastfeeding and healthy eating, and financial guidance for parents that is based in the communities they are intended to serve (Cattan et al. 2019; Jayaratne, Kelaher, and Dunt 2010). As children grow older, there are two primary means of delivering free school meals (FSM) which are intended to provide children with healthy meals. One is means-tested and children in families receiving income-related benefits are eligible. A second scheme, started in 2014, is Universal Infant FSM, for children in school aged 4–7 (Parnham et al. 2020). It is important to note that only children in state-funded infant schools (Reception to year 2) are eligible for this entitlement, meaning that all children below 4 years old and all those attending non-state funded early years settings are excluded (Rabe and Holford 2020). While the specific impacts of each programme on health outcomes can be difficult to

disentangle, a recent ecological study identified a positive correlation between social spending and decreased risk of childhood obesity in OECD countries (Miyawaki et al. 2021).

This analysis seeks to answer the following research question: How do different actors across the early years sector work to promote food and nutritional well-being of young children in EYS, and what barriers do they report experiencing?

Methods

Sampling and participants

Key stakeholder groups were determined from preliminary, desk-based research, and in consultation with collaborators working in local authorities (LAs) and for non-governmental organizations (NGOs) supporting healthy eating for young children. A scoping exercise using Mendelow's matrix mapped a wide range of stakeholders based on their level of interest and potential influence in the research topic (ordered from low to high interest on the X and Y axes, respectively). (Mendelow) Groups classified as having both high interest and high influence were focused upon. These groups included Ofsted, NGOs, membership organizations, EYS including children's centers, and teams that coordinated EYS within LAs. Despite being considered low-influence, researchers were included because they have experience working across the different groups and were thought to be able to provide a broader picture about how the aforementioned groups work together. This preliminary work was carried out before the first Covid-19 lockdown.

Data collection

Contacts from relevant organizations were identified online and relevant people were approached via e-mail with an information sheet about the study. Once they agreed to participate, they were sent a consent form which they were asked to read and sign. Interviews began in November 2020 and carried on through March 2021, in the midst of the second and third Covid-19 lockdowns in England. Interviews were conducted via a teleconferencing website and were audio recorded. Interviews were personalized for each respondent based on the organization they worked for, their role, and their previous contributions to articles, conferences, and public meetings. All interviews followed a similar structure and addressed policies or programmes relating to food provision and practices in EYS, the use of guidance, tactics used to improve food provision, and concerns around inequalities. All interviews were transcribed verbatim. 16 of the 36 people we invited to participate

agreed (with two respondents inviting peers to join them to supplement their knowledge). With the exception of Ofsted, representatives from all approached stakeholder groups participated in the research.

Analysis

Thematic analysis was used to interrogate the data (Green and Thorogood 2018). All transcripts were imported into NVivo 12 for analysis. An original list of *a priori* codes was developed deductively based on the research question and shared across the study team. Two researchers (EW and LW) coded two separate interviews using the deductively developed codes and developed an additional list of inductive codes. These codes were synthesized into a new coding structure and used to code all interviews. Subsequent emergent codes were added when needed. Interviews were analyzed prospectively so that emergent themes or questions could be explored in later interviews.

To move from descriptive, open coding to analytic axial coding, the data contained in each code was summarized, with particular attention paid to how different participants describe phenomena and the relationship between codes. These thematic summaries were shared with the team, discussed, refined, and re-interrogated based on the discussion. When divergent descriptions about a theme emerged, the meaning and importance of the difference to various stakeholders were explored, as well as the context of its emergence. Drafting and discussing the summaries was also fundamental to advancing the analysis (Lofland 1970).

Ethical approval was granted from the London School of Hygiene & Tropical Medicine's Research Ethics Committee (ref 21884 /RR/197240).

Findings

Sixteen interviews were conducted with 18 people representing NGOs, MOs, LAs, HVs, and researchers. Of those participants, three participating NGOs also manage or own EYS, either through commercial arms or social enterprises and were therefore also providing opinions from a setting perspective. Geographically, our respondents were dispersed across ten English counties with London having the greatest representation. (See [Table 1](#) for more details.)

Key themes emerging from the analysis, and informing the structure of the section below, include: the early years sector being under-resourced and insufficiently consulted, working multiple roles to support children and families, the complexity and variability of food-related programmes to support EYS, inadequate and nationally fragmented support, whether or not food guidelines should be compulsory, and the real cost of 'free' childcare under the 30-hour policy.

Table 1. List of stakeholder sectors and participant numbers.

Type of stakeholder	Number of interviews	Number of interviewees	Counties represented from each sector
Non-governmental organization (NGO)	5	6	Bristol, Hertfordshire, London, Oxfordshire
Membership organization (MO)	2	3	Kent, London
Local authority (LA)	4	4	London, West Yorkshire
Researchers	3	3	Bristol, Leeds, London
Health visitors (HV)	2	2	Cheshire, County Durham
Total	16	18	10

“We’ve got our finger in every pie” – working in multiple roles to promote the health of young children and their families

Stakeholders across the sector reported serving multiple roles across education, food and nutrition, and family support. A key mechanism through which families are supported by the early years sector is via signposting to relevant services. For example, HVs, NGOs, MOs and EYS all reported referring families into the Healthy Start programme. A staff member at an NGO that runs EYS spoke about how they were particularly well-placed to signpost families to a variety of community resources:

... it’s not funny, but I do joke with them [EYS staff] in the fact that we are a social worker, we’re a health visitor, we’re an early years’ practitioner, because we’re always that first person [...]. We trained all our managers in mental health first aid because they were dealing with problems, not only with staff, but with parents that would be coming to the centre and experiencing these range of issues to do with poverty or lifestyle or debt or whatever. And they see this person that they see nearly every day, and they trust you, so they want to tell you stuff. So, we’ve become very much a signposting service. (16NGO)

HVs working through children’s centers, family hubs, GP practices, and family homes were also able to meet with parents to address their food-related concerns and provide them with timely interventions or advice, including referrals for children who were found to be overweight or obese to receive specialist support such as parental lifestyle coaching and other targeted interventions. In some areas, HVs who have undergone specific training in health promotion and healthy weight were able to build a wider support network around families with young children who were struggling with multiple aspects of food, including sensory eating challenges and emotional resilience, in order to limit the effects of parents’ poor relationships with food on their young children.

We’ve got our finger in every pie basically, and I try and spread my net as wide as I can if I think there’s something that would help. So, the emotional resilience team have had a lot of referrals to their new service, the two school nurses. And because they were a bit

overwhelmed with fussy eating, myself and two of the lifestyle practitioners, who are nutritionists by trade, have sorted out a fussy eating presentation which can be given virtually that they will deliver to families who need that. (12 HV 10 March)

There was a general view among respondents that EYS were the ideal place to promote healthy eating among staff and parents. When discussing how they work to encourage a healthy relationship with food, one health visitor explained:

I spoke to one nursery . . . and even the nursery manager there was surprised at how they could change their language very easily. So not saying that the pudding was a reward for the main, for instance, and that the pudding is the best part, and you've got to eat your vegetables. All those sorts of messages that we give without realising that don't make us feel good about vegetables. And then about listing all food as neutral, sweet and savoury is good if it's healthy, and the more you see it the more likely you are to eat it.

This neutrality when discussing foods and encouragement of eating vegetables was described by stakeholders as especially important because of the amount of time that many children spend in EYS where staff are to introduce vegetables multiple times to encourage their acceptance.

“Are we just promoting people’s ability to stick their fees up?” The complexity and variability of programmes to support food and nutrition in EYS

Respondents described the complexity and variability of healthy eating programmes on offer, in that many different types of organizations offered similar programmes, some at a cost and some free, covering a range of different topics, with or without accreditation. In some LAs these services, including trainings, awards, and menu and food-related policy reviews were provided free of cost to some EYS, but others reported having to pay either the LA or a relevant organization; thus, it was reported that not all EYS were able to benefit from services equally.

One programme that was reported to be offered frequently was a review of existing EYS menus and food policies. These reviews were described as ranging from simple and focused, for example increasing fruit and vegetable consumption or more intensive, for example by ensuring compliance with guidelines. Some NGO respondents provided assistance to EYS wishing to develop a food policy. These programmes also offered a range of food and healthy eating award schemes for EYS. Some awards were described as accredited by public sector bodies, and were mostly managed by NGOs and MOs themselves. For example, the Healthy Early Years London Award, funded through the Mayor’s Office, was reported to aim to complement the EYFS and focus on health. One NGO respondent reported developing a training

programme to simultaneously gain an award they themselves developed, as well as the Healthy Early Years London award, acknowledging the challenges of public funding for EYS:

Healthy Early Years London is fantastic, but I guess there may be a time that that funding is no longer there. (5 NGO)

Other awards were reported to synergize goals across the public, NGO and MO partners' work, for example by helping EYS assess compliance with the voluntary food and drink guidelines, and with EYFS and UNICEF requirements and standards. Other aspects of awards included incorporating food into the broader curriculum and encouraging breastfeeding, both of which are public health goals. Respondents reported a plethora of possible award schemes to apply for, some of which are tiered, with different levels to achieve by EYS. They also discussed the variability of topics that needed to be addressed in order to achieve certain awards, such as compliance with voluntary guidance, local procurement of food, signposting to Healthy Start, knowledge about supporting breastfeeding, food prepared without additives, developing or having a food policy, and/or staff training.

Respondents also reported challenges with the implementation of awards. A local authority stakeholder described that they discontinued offering an award scheme because of difficulties monitoring quality once the award was given, and because setting managers were changing so frequently that having the award was insufficient to guarantee that good practice had continued. Another challenge had to do with potential inequalities linked to awards, where parents, able to pay more for EYS that have a food-based award, may inadvertently be punishing EYS and/or families who cannot afford to participate in an award scheme. As one stakeholder described:

So, it was one of the tensions we had in terms of, are we doing good things generally, or are we just promoting people's ability to stick their fees up by 10% because they offer healthy food? [...] The wealthier settings that I've alluded to who think [awards are] a good thing to promote to yummy mummies. (4MO)

“Absolutely fumbling in the dark”: Inadequate and fragmented support for EYS

The interviews highlighted the difficulty in accessing food-related training opportunities. Respondents reported that local authority commissioned training are contingent on having sufficient funding, and are therefore not available in all areas and may not be available for extended periods of time. Within what many describe as an “underfunded” sector, staff in LAs described being able to offer variable levels of training. One LA prioritized smaller not-for-profit organizations, providing care for the more vulnerable children, while another

rationed support based on unmet needs as evaluated through Ofsted ratings. Depending on local arrangements, some EYS are not able to afford trainings offered by LAs or relevant organizations.

It was reported that the inconsistent support for training translated into inconsistent knowledge on food and nutrition across EYS. In relation to portion size specifically, one LA staff member described some EYS as “absolutely fumbling in the dark” (15 LA). Despite the existence of EYFS (Department for Education 2017) and age-specific guidance, (Action for Children 2017; Government, HM 2017b; HM Government 2017) respondents reported that staff in EYS sometimes held many non-evidence based beliefs and practices about what and how to feed young children. For example, a local authority ran a specific training for an EYS where nursery chefs worried that previous training was asking them to provide insufficient food for children. After further training, staff accepted that they had been serving too much. As one LA staff member reported:

You need to get it right at this stage. They're not going to drop over from hunger. And as long as it's a good quality meal, this is all they need for their age group. And actually, you're overfeeding them. And then sharing the obesity figures and saying, actually, you're setting them up for that. But once we'd gone in and done that bite size session, they [staff] were all fine with it, they all accepted the change in policy and practice. (15 LA)

EYS were also described as receiving insufficient support on packed lunches, a topic several respondents reported as contentious and sensitive: not all EYS had the facilities to provide hot lunches, and not all parents wanted their children to eat food from the EYS; moreover, EYS staff felt uncomfortable engaging with parents to “make healthy choices where they're asking to bring their child's food in themselves.”(2MO) Working with parents in a sensitive manner was described as challenging, and one respondent reported feeling conflicted about whether or not poor nutrition was a family matter or a safeguarding issue, exposing broader areas of concern about the child's wellbeing. Others approached the issue of healthy packed lunches as a structural inequity and not a parenting failure:

I'm never really comfortable with framing it [parents not knowing what foods to bring in] as an educational problem because I think it's not. I think it's much bigger than that and I think it's systemic [...] And it's possibly not really the place of early years to be supporting that behaviour change in the parents. (11 Researcher)

Mandatory minimum nutritional standards: a “no-brainer” or “neoliberal tick-box nonsense”?

Many respondents reported using the ‘Eat Better, Start Better’ voluntary food and drink guidelines (Action for Children 2017) to plan adequate and appropriate nutrition for young children. Others however had never heard of them

or did not use them. Stakeholders expressed concern that the guidance is currently owned by an NGO with a commercial arm instead of freely and easily available from the Department of Health and Social Care or the Department for Education. Other sources of guidance referred to by stakeholders included the First Steps Nutrition Trust and the Eat Well Plate, which are not intended for children under 2 (Government 2016; First Steps Nutrition Trust).

When discussing whether or not food and drink guidelines for early years should be made compulsory or remain voluntary, one respondent argued that each EYS is different and that the unintended consequences of making the guidelines mandatory, potentially including higher prices, are unacceptable. Others were supportive of the idea in principle but were concerned that in practice “it’ll become an iron rod to beat you with” and “neoliberal tick-box nonsense.” (9NGO) Other concerns included the fear that Ofsted inspectors would have difficulties evaluating whether a menu met the standards and the current EYFS requirement was sufficient for ensuring quality.

Most however believed that the guidelines should be made compulsory for a range of reasons, including establishing healthy food preferences and food-habits, reducing the burden of childhood (and related adulthood) obesity, providing consistency across the sector, enabling EYS to feel more confident in interpreting the EYFS, and improving equity. One interviewee was also concerned that in their work they regularly spoke to parents and carers who believed they knew a lot about nutrition but were in fact feeding their children excessive amounts of unhealthy, ultra-processed foods. In one LA, a dietician strongly in favor of mandatory guidelines argued in her training of EYS staff that despite being called “voluntary food and drink guidelines” they are, in actuality, mandatory: EYS are legally mandated to implement the EYFS and the only way to ensure that the food meets those standards is to implement the voluntary guidelines. (6 LA) Another respondent was supportive of a mandatory approach, stating the following:

Mandatory minimum nutritional standards? It’s a bit of a no-brainer, isn’t it? [...] You can have the best policies in the world, but if nobody follows them, they’re not worth the paper they’re written on. It’s as simple as that. (7 Researcher)

Barriers and challenges to using the guidelines were also described: some EYS struggled to implement the guidance due to its length and complexity, or simply that approaching the guidance was “daunting.” Several respondents expressed concerns about how scientific evidence was incorporated into the guidance and where key recommendations had come from. Similarly, the field of childhood nutrition was described as evolving so quickly that foods that were once considered healthy (e.g., raisins) were now seen as inappropriate for children at most times, and foods that were

limited in the guidelines were now more commonly acknowledged to be good for children's health (e.g., carbohydrates). The guidance suggests that either fruit or dairy-based desserts are served after main meals, and this was criticized by both researchers and LA staff who felt it set an expectation for children that all meals should end with something sweet, which may lead to increased sugar consumption.

The guidance was also described as being insufficiently inclusive of foods or flavors from other cultures. There was concern that this limitation may lead to lower adoption of the resources, and therefore may worsen health outcomes for those who do not feel relevant foods are represented in the guidelines. As explained by one respondent:

What I was seeing was that every nursery was providing children with a bloody bucket full of carrot sticks and hummus. I kept thinking they're feeding these children like they're middle-class starving, on-a-diet 40-year-olds [. . .] So, I decided that [. . .] we were going to provide scones for those children and muffins, because they're hungry at four o'clock. And of course, we were proven right in the end . . . because they did a national study and found that a lot of children in nurseries were short on carbohydrate and short on zinc. And that's because they had been listening to all these ridiculous dieticians and nutritionists who [wrote the guidelines]. (9NGO)

"Treated like Cinderella": an insufficiently consulted and under-resourced sector

There was near complete consensus amongst stakeholders that the early years sector is forgotten, underfunded, and under-consulted. When stakeholders were consulted by government, some felt their involvement was tokenistic:

We were somehow used as a sounding board for discussions. Whether those ever led to any changes in policy or approach, I don't know. Or whether, we were just there to tick a box, so the early years sector has been actively involved in the development of X, Y, and Z. (4MO)

Many respondents from across the early years sector expressed that young children were seen as less important than school-aged children, and were therefore neglected, despite the well-documented and crucial importance of establishing good diet and health in the first years of life. Respondents cited decreasing investment in young children, for example via cuts to the Healthy Start scheme, Sure Start and children's centers, and decreased funding for HVs and support programmes for young children provided through local councils. Many stakeholders argued that structural changes like re-investing in these schemes would make more difference than individual behavior-change interventions, such as talking to parents about what should or should not be in a packed lunch. Currently, with fewer resources being dispersed to LAs to support young children, there are also fewer maintained nursery schools which benefit from additional

government support, including free school meals for pre-school aged children – a proviso which leaves the majority of children who attend private, voluntary, and independent EYS without such support. As explained by one respondent:

And here we are, back into the Victorian days of the deserving and the undeserving poor. [...] I wrote to Boris [Johnson, the prime minister] three times to say you're missing the under-fives. Free-school meals isn't something available to under-fives. So, if you're giving [...] free school vouchers during the holidays, you have to do something for them [children under 5] as well. And I got the most anodyne response back from our dreadful minister, [name redacted], telling me that [...] maintained nursery schools could have free school meals. And I said, yes, but what about that half a million children that are not in [LA] maintained nursery. (9NGO)

Lack of long-term investment was described as creating a number of challenges not just for the sector, but also for the long-term health of the population. MOs, LAs, and NGOs all described how governmental budget cuts decreased service available to young children, or moved programmes for early years into primary education where they were assumed to have decreased impact. Describing the loss of a programme that teaches young children to grow food, a respondent explained:

So, we used to have that [...] and I think it was just as the budgets have just got tighter and tighter and tighter and that seems to have fizzled out quite a bit, and it was such a good program. And, again, I think that started out in the schools when really it should have been focused a lot earlier on than that. (10 LA)

Others concurred with the critically low levels of relevant resources:

I think the problem with early years is that there's not really any funding to support nutrition. Obviously, there was at one point, in terms of the public health direction, but all their funds have moved into other arenas. (16NGO)

One respondent from an NGO described trying to pull interested parties together to fill the void left by government when budgets were cut and working to coordinate information about nutrition, explaining that

Again, that's us pulling together off our own backs, there's nobody supporting or funding this, but we just see that this is going to become a huge issue post-pandemic, and want to do something to support people. (16NGO)

This neglect was also felt by stakeholders who described the EYS as insufficiently consulted, and argued that the government failed to appreciate what the sector contributes to the health of children and families.

[...] we're always treated like Cinderella. So, nobody invites us to any of the so-called fancy pants meetings, because 'what would we know'? Because we know nothing. But we [our organization] are delivering a service to 4,500 children a week. And so, please tell me we know something. (9NGO)

“A double-whammy” – the real cost of ‘free’ childcare hours

The final key challenge described by respondents was the implementation of the “free” childcare hours policy. Most respondents reported that EYS struggled to provide the 30 ‘free’ childcare hours, as the money for which they were paid for them by the government does not cover the settings’ costs. In order to provide those ‘free’ hours, stakeholders reported that EYS had to absorb costs. A respondent reported that the 30-free hours

was about child care, it wasn’t about food provision. So, it’s really the nurseries that have made it happen, many of them that have found a way to get that funding so that they get a nice meal, particularly if they’re in deprived areas. (1NGO)

EYS employed multiple strategies to address the issues associated with the scheme not covering the cost of food. Some EYS, particularly those with inadequate kitchen facilities, asked parents to bring in packed lunches. Other reported that some EYS compensated for this shortfall by raising the price of food and/or childcare for parents not using the subsidy. (2MO, 4MO, 7Researcher) One respondent from an MO reported:

What was happening in most settings is that we were offsetting that loss by charging the paid parents [those not using the offer] more. And obviously, the more the 30 hours comes in [families using the offer and therefore not paying at cost], the less [fewer hours] paid parents need, the less opportunity you’ve got to [..]charge extra from those parents that are paying for the full childcare themselves. (2MO)

The 30-hour subsidy was described as a “double whammy” in deprived areas where EYS were providing food for children who attended nursery for the first time because they became eligible for free care and who also did not have many parents earning enough to cross subsidize the costs the government does not pay for. One reported consequence of the financial shortfall was that some EYS will not accept children whose parents want to utilize the free hours because it makes the setting operate at a deficit. As explained by a respondent:

I think you will find some statistics [..] where the decline [of settings taking up the offer of] funded-only hours to children, particularly in London, has gone down significantly. Because a) they [settings] don’t want to take on the government because they can’t be f***ed with them [the government], and b) they can’t afford it. (9NGO)

Discussion

Sixteen interviews were conducted with 18 respondents across the early years sector to understand how different actors work to promote food and nutrition in EYS and the barriers they report experiencing. London was the most represented county, which may have been influenced by many NGOs and MOs having headquarters in the capital.

Despite the wide range of stakeholders we interviewed, nearly all respondents from across the sector reported that the early years sector is forgotten, underfunded, and under-consulted. The implications of insufficient resources and support were felt in many ways, with respondents reporting the need for individual EYS professionals to cover multiple roles across education, food and nutrition, and family support. The lack of attention afforded the sector was also felt in the complexity and variability of food and nutrition-related programmes on offer, with many different types of organizations offering similar programmes, some at a cost and some free, with various eligibility criteria, covering a range of different topics. Possibly due to the precarity of the funding climate and variations in the prioritization of early years within different LAs, these repetitious and overlapping service offerings have been reported to result in an unequal distribution of services and/or access.

During the time of our data analysis, internal government documents were released through a Freedom of Information Act request filed by the Early Years' Alliance, indicating that the government has knowingly underfunded the early years sector, and knew that EYS would be unable to provide the 30-hours of free care at the set cost (Early Years Alliance 2021). Analysis conducted by Ceeda, an independent research organization focused on childcare, showed that the average funding given to LAs was £4.89, equivalent to a £2.60 shortfall per hour per child, or a £2,964 deficit per child per year. In order to provide the “free” spaces, government documents revealed they intended EYS to maximize the ratios of children to adults in classrooms, (Department for Education) driving down the quality of education (Weale 2021) and pass the costs onto other families not using the scheme. Our interviews with stakeholders confirm that even before this evidence was released, those working in the sector knew that it was impossible to provide good-quality childcare at the cost the government set. Having to find ways to cover the costs of the government shortfall and in some instances, finance food for children using the offer, exacerbated the collective sense across the sector that government funding for EY is insufficient.

Another key finding from this research was that most respondents agreed that the food and drink guidelines for EYS should be statutory, as it is in primary and secondary schools in England (Health Promotion Agency 2008). However, a number of caveats and concerns were voiced about the current voluntary arrangements. These included logistic difficulties for EYS in homes, or in EYS without adequate food-preparation facilities, on how this would impact on children who ate packed food, and whether the implementation of food-based guidelines might actually worsen health inequalities for children whose parent could not afford to buy setting-prepared meals. The HM Government guidelines which are free to access were mentioned less frequently and seen as secondary compared to the voluntary guidelines.

For feasibility reasons, we had to prioritize the stakeholder groups we could include in this research. This meant that certain stakeholder such as food safety groups, dentists, and parents/carers were not invited to participate, despite their influence in the sector. We were also unable to secure an interview with anyone from Ofsted despite repeated efforts, in order to document their perspectives on inspections of EYS as an opportunity or challenge to improving food provision. Another limitation was not being able to capture the spectrum of possible food-related services offered through LAs. Despite reaching out to many LAs, there were few who were willing to participate in research. Our interviews were conducted during Covid-19 lockdowns when many settings were overwhelmed but there also may be other reasons for nonparticipation which we are unable to speculate about.

These interviews with key EYS stakeholders emphasize the essential changes required to strengthen the current system delivering healthy foods in EYS, thereby prioritizing the health and wellbeing of children under 5 years in England. For example, a long-standing concern remains about whether existing voluntary dietary guidelines for this age group work sufficiently well, or whether statutory minimum dietary standards for food provided in EYS should be implemented, as it is across the state school system. This requires proper consultation and prioritization. Also of note are the reported underfunding of this sector, a finding which aligns with other recent studies, such as a longitudinal ecological study which found that, for each 10% spending cut to Sure Start children's centers, there was a 0.34% relative increase in obesity in the following year. Researchers estimate that this led to an additional 9174 children with overweight and 4575 children with obesity compared to the prevalence expected had funding remained stable. During the study period (2010–2018) funding decreased on average by 53%, with more deprived areas facing deeper cuts (Mason et al. 2021).

Stakeholders were unanimous in their belief that the government should increase its investment in young children, both directly, via increased funding to EYS, children's centers, family hubs, and Healthy Start, but also indirectly via improved funding for LAs and increased financial benefits that allow families just above current thresholds to escape poverty. One of the reported consequences of insufficient funding in the sector is that settings are asking more families to send children in with packed lunches yet recent research suggests that packed lunches are of worse nutritional quality and are more likely to contain crisps, sweets, and sugar-sweetened beverages (Evans et al. 2020; Nicholas et al. 2013). Therefore, strengthening food provision in the EYS sector is crucial to ensure the health and wellbeing of the vulnerable 0–5 years age group, and should comprise increased government leadership, improved

consultation with the EYS sector, as well as sustainable investment in, and prioritization of this sector.

Acknowledgements

We would like to acknowledge all the study participants who gave their time and expertise to us.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

The Unit is funded by the National Institute for Health and Care Research (NIHR) Policy Research Programme (reference PR-PRU-1217-20602).

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References

- Action for Children. 2017. *Eat better, start better voluntary food and drink guidelines for early years settings in England – A practical guide.*
- Agency, Health Promotion. 2008. “Nutritional standards for school lunches: A guide for implementation.”
- Allender, S., and M. Rayner. 2007. The burden of overweight and obesity-related ill health in the UK. *Obesity Reviews* 8 (5):467–73. doi:10.1111/j.1467-789X.2007.00394.x.
- Beard, J. 2003. Iron deficiency alters brain development and functioning. *The Journal of Nutrition* 133 (5):1468S–1472S. doi:10.1093/jn/133.5.1468S.
- Cattan, S., G. Conti, C. Farquharson, and R. Ginja. 2019. “The health effects of sure start.”
- Children’s Food Trust. 2016. Nursery world and children’s food trust childcare food survey. Findings from an online survey 19 October–30 November 2015.
- Cowley, S., S. D. Woody Caan, H. Weir, and H. Weir. 2007. What do health visitors do? A national survey of activities and service organisation. *Public Health* 121 (11):869–79. doi:10.1016/j.puhe.2007.03.016.
- Cusick, S. E., and M. K. Georgieff. 2016. The role of nutrition in brain development: The golden opportunity of the “first 1000 days.” *The Journal of Pediatrics* 175:16–21. doi:10.1016/j.jpeds.2016.05.013.
- Department for Education. *Re: Early years funding rate negotiation.* Department for Education.
- Department for Education. 2017. *Statutory framework for the early years foundation stage: Setting the standards for learning, development and care for children from birth to five.* Department for Education.
- Department for Education. 2019. *Childcare and Early years survey of parents in England 2019.* Department for Education.

- Early Years Alliance. 2021. [EMBARGOED] *private government documents show ministers knew that underfunding early years would mean higher childcare costs for parents*. London.
- Eckhardt, C. L. 2006. Micronutrient malnutrition, obesity, and chronic disease in countries undergoing the nutrition transition: Potential links and program/policy implications.
- Epstein, J. L. 2010. School/family/community partnerships: Caring for the children we share. *Phi delta kappan* 92 (3):81–96. doi:10.1177/003172171009200326.
- Evans, C. E. L., C. L. Cleghorn, D. C. Greenwood, and J. E. Cade. 2010. A comparison of British school meals and packed lunches from 1990 to 2007: Meta-analysis by lunch type. *British Journal of Nutrition* 104 (4):474–87. doi:10.1017/S0007114510001601.
- Evans, C. E. L., K. Elizabeth Melia, H. L. Rippin, N. Hancock, and J. Cade. 2020. A repeated cross-sectional survey assessing changes in diet and nutrient quality of English primary school children’s packed lunches between 2006 and 2016. *BMJ open* 10 (1):e029688. doi:10.1136/bmjopen-2019-029688.
- First Steps Nutrition Trust. “Eating well resources.” accessed 7 September, 2021. <https://www.firststepsnutrition.org/eating-well-resources>.
- Goldthorpe, J., T. Epton, C. Keyworth, R. Calam, and C. Armitage. 2019. Who is responsible for keeping children healthy? A qualitative exploration of the views of children aged 8–10 years old. *BMJ open* 9 (5):e025245. doi:10.1136/bmjopen-2018-025245.
- Government, H. M. 2016. *The Eatwell Guide: Helping you are a healthy, balanced diet*. Public Health Engand. edited by.
- Government, HM. 2017a. 30 hours free childcare.
- Government, HM. 2017b. *Example menus for early years settings in England part 2: Recipes*. London: Public Health Engand.edited by.
- Green, J., and N. Thorogood. 2018. *Qualitative methods for health research*. sage.
- Herman, D. R., M. Taylor Baer, E. Adams, L. Cunningham-Sabo, N. Duran, D. B. Johnson, and E. Yakes. 2014. Life course perspective: Evidence for the role of nutrition. *Maternal and Child Health Journal* 18 (2):450–61. doi:10.1007/s10995-013-1280-3.
- HM Government. 2017. *Example menus for early years settings in England part 1: Guidance*. London: Pubklic Health England.edited by.
- Huh, S. Y., and C. M. Gordon. 2008. Vitamin D deficiency in children and adolescents: Epidemiology, impact and treatment. *Reviews in Endocrine and Metabolic Disorders* 9 (2):161–70. doi:10.1007/s11154-007-9072-y.
- Ian, D.-H., C. Nishida, and W. P. T. James. 2004. A life course approach to diet, nutrition and the prevention of chronic diseases. *Public Health Nutrition* 7 (1a):101–21. doi:10.1079/PHN2003584.
- Jayaratne, K., M. Kelaher, and D. Dunt. 2010. Child health partnerships: A review of program characteristics, outcomes and their relationship. *BMC Health Services Research* 10 (1):1–10. doi:10.1186/1472-6963-10-172.
- Larson, N., D. S. Ward, S. Benjamin Neelon, and M. Story. 2011. What role can child-care settings play in obesity prevention? A review of the evidence and call for research efforts. *Journal of the American Dietetic Association* 111 (9):1343–62. doi:10.1016/j.jada.2011.06.007.
- Lock, K., J. Pomerleau, L. Casuer, D. R. Altmann, and M. McKee. 2005. The global burden of disease attributable to low consumption of fruit and vegetables: Implications for the global strategy on diet. *Bulletin of the World Health Organization* 83 (2):100–08. S0042-96862005000200010.
- Lofland, J. 1970. “Interactionist imagery and analytic interruptus.” *Human nature and collective behavior: Papers in honor of Herbert Blumer*:35–45.
- Lucas, P. 2017. Pack it in? *Nursery World* 2017 (19):16–17. doi:10.12968/nuwa.2017.19.16.

- Lucas, P. J., T. Jessiman, and A. Cameron. 2015. Healthy start: The use of welfare food vouchers by low-income parents in England. *Social Policy and Society* 14 (3):457–69. doi:10.1017/S1474746415000020.
- Marmot, M. 2020. Health equity in England: The Marmot review 10 years on. *Bmj* 368: doi: 10.1136/bmj.m693.
- Martorell, R., and A. Zongrone. 2012. Intergenerational influences on child growth and undernutrition. *Paediatric and Perinatal Epidemiology* 26:302–14. doi:10.1111/j.1365-3016.2012.01298.x.
- Mason, K. E., A. Alexiou, D. Lee Bennett, C. Summerbell, B. Barr, and D. Taylor-Robinson. 2021. Impact of cuts to local government spending on sure start children's centres on childhood obesity in England: A longitudinal ecological study. *Journal of Epidemiology and Community Health* 75 (9):860–66. doi:10.1136/jech-2020-216064.
- Mendelow, A. "Stakeholder Mapping," Proceedings of the 2nd International Conference on Information Systems, Cambridge, MA.
- Mitchell, P. J., C. Cooper, B. Dawson-Hughes, C. M. Gordon, and R. Rizzoli. 2015. Life-course approach to nutrition. *Osteoporosis International* 26 (12):2723–42. doi:10.1007/s00198-015-3288-6.
- Miyawaki, A., C. Elizabeth Louise Evans, P. Jane Lucas, and Y. Kobayashi. 2021. Relationships between social spending and childhood obesity in OECD countries: An ecological study. *BMJ open* 11 (2):e044205. doi:10.1136/bmjopen-2020-044205.
- Mucavele, P., C. Wall, and L. Whiting. 2020. Development of HM Government example menus for early years' settings in England. *Nutrition Bulletin* 45 (4):503–11. doi:10.1111/nbu.12472.
- Nicholas, J., L. Stevens, L. Briggs, and L. Wood. 2013. Pre-school food survey. *Sheffield: Children's Food Trust* 38.
- OECD. 2020. "Is Childcare Affordable?" Policy brief on employment, labour, and social affairs, edited by. Paris: OECD.
- Ofsted. 2019. *Early years inspection handbook for Ofsted registered provision*. Ofsted.
- Ofsted, OfSTED. 2015. The common inspection framework: Education, skills and early years. *Office for Standards in Education*.
- Osei-Assibey, G., S. Dick, J. Macdiarmid, S. Semple, J. J. Reilly, A. Ellaway, H. Cowie, and G. McNeill. 2012. The influence of the food environment on overweight and obesity in young children: A systematic review. *BMJ open* 2 (6):e001538. doi:10.1136/bmjopen-2012-001538.
- Parnham, J. C., A. A. Laverty, A. Majeed, and E. P. Vamos. 2020. Half of children entitled to free school meals did not have access to the scheme during COVID-19 lockdown in the UK. *Public Health* 187:161–64. doi:10.1016/j.puhe.2020.08.019.
- Rabe, B., and A. Holford. 2020. Impact of the universal infant free school meal policy. *Institute for Social and Economic Research*. <https://www.iser.essex.ac.uk/files/uifsm-impact.pdf>
- Rayner, M., and P. Scarborough. 2005. The burden of food related ill health in the UK. *Journal of Epidemiology & Community Health* 59 (12):1054–57. doi:10.1136/jech.2005.036491.
- Sabinsky, M. S., U. Toft, H. M. Sommer, and I. Tetens. 2019. Effect of implementing school meals compared with packed lunches on quality of dietary intake among children aged 7–13 years. *Journal of Nutritional Science* 8: doi: 10.1017/jns.2018.29.
- Scarborough, P., P. Bhatnagar, K. K. Wickramasinghe, S. Allender, C. Foster, and M. Rayner. 2011. The economic burden of ill health due to diet, physical inactivity, smoking, alcohol and obesity in the UK: An update to 2006–07 NHS costs. *Journal of Public Health* 33 (4):527–35. doi:10.1093/pubmed/fdr033.

- Stevens, L., J. Nicholas, L. Wood, and M. Nelson. 2013. School lunches v. packed lunches: A comparison of secondary schools in England following the introduction of compulsory school food standards. *Public Health Nutrition* 16 (6):1037–42. doi:10.1017/S1368980013000852.
- Syrad, H., C. H. Llewellyn, C. H. M. Van Jaarsveld, L. Johnson, S. A. Jebb, and J. Wardle. 2016. Energy and nutrient intakes of young children in the UK: Findings from the Gemini twin cohort. *British Journal of Nutrition* 115 (10):1843–50. doi:10.1017/S0007114516000957.
- Weale, S. 2021. “Ministers ‘knowingly underfunding’ childcare sector in England.” *The Guardian*, 15 June, 2021, Early years education. <https://www.theguardian.com/education/2021/jun/15/ministers-knowingly-underfunding-childcare-sector-england>.
- World Health, Organization . 2019. *Essential nutrition actions: Mainstreaming nutrition through the life-course*.