# Professional perspectives on dietary practices and nutrition from pre-conception to birth: An exploratory study

# > Abstract

The foundations for child health begin in pregnancy and pre-conception; however, little is known about how health professionals advise prospective parents regarding nutritional needs. The aim of this study was to understand the facilitators and barriers to healthy food and diet practices during preconception and pregnancy; how the barrier(s) to healthy diets can be addressed; and the changes required to facilitate good food practices. Three focus groups and four interviews were conducted with 12 UK professional representatives working in health or dietary/nutrition contexts. Participants reported that expectant parents need to understand what healthy eating means and that health and allied health professionals require more nutrition-related education to maximise health promotion opportunities. There is a need for consistent, engaging and culturally appropriate dietary information, as well as access to professionals who can give generic and tailored advice.

# **Key words**

- > Qualitative research > Child health > Nutrition > Diet practices
- > Pre-conception > Pregnancy

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he need for good nutrition begins at the pre-conception stage and should continue throughout the life course. What happens during the early years of life (from pre-conception to 4–5 years) influences physical, cognitive and emotional development in childhood, and can set the trajectory for health and wellbeing outcomes in later life – and one of the fundamental factors is diet (Public Health England (PHE), 2018; Obesity Health Alliance (OHA), 2021).

Studies focusing on adherence to dietary quidelines among men and women during pre-conception and in pregnant women suggest nutritional recommendations are not being met (Caut et al, 2020), particularly among those from lower-income groups. Poor maternal diets may affect babies in several ways; for example, inadequate food intake, low maternal weight, and micronutrient deficiency (especially of folate) are linked to low birth weight (Chief Medical Officer, 2015). Folic acid supplementation can significantly reduce the risk of neural tube defects such as spina bifida, but there is lower uptake in those from deprived areas (PHE, 2019a). Poor diets and obesity are risk factors in those from lower incomes (along with substance misuse, mental health problems and smoking) and are associated with poorer pregnancy outcomes and the development of lifelong diseases (PHE, 2019a).

Szwajcer et al (2005) revealed that women feel that information about nutrition in pregnancy is important as it is something that they can control themselves to help protect their unborn child. Research has found that education and counselling is an effective approach for improving maternal nutrition in pregnancy, particularly in reducing maternal anaemia, increasing infant

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birth weight and decreasing preterm births (Arrish et al, 2017; Caut et al, 2020).

In theory, dietary advice can be provided by health professionals such as midwives, dietitians and health visitors. However, research undertaken with midwives (Arrish et al, 2017) found that antenatal nutritional quidance is not common practice. There is also evidence that midwives do not always have the capacity and time. For example, they can struggle to provide advice, especially on challenging issues such as weight management, despite acknowledging it as part of their role, and they report barriers including lack of time, resources and models of care (Arrish et al, 2017). Olloqui-Mundet et al (2023) substantiate this in their literature review, which identified that midwives felt nutritional advice in pregnancy was important and was part of their role but that their knowledge in this area was limited.

Health visitors have been identified as having a crucial role in promoting health and reducing health inequalities (Local Government Association, 2023). While pockets of good practice exist (Watson, 2015), the Institute of Health Visiting (iHV, 2019) states that without investment in the health visiting workforce, the ability of health visitors to influence health inequalities is substantially reduced (Stacey and Gilroy, 2019).

Along with potential support available from health professionals, there are policy interventions aimed at tackling diet in pregnancy. In the UK, the Sure Start initiative was introduced to 'give help and advice on child and family health, parenting, money, training and employment' (Gov.uk, 2024). Sure Start programmes aim to offer support and advice from professionals such as midwives and health visitors in relation to a range of areas that encompass nutrition (including breastfeeding) and parenting (NI Direct Government Services, 2024). However, the role of health visitors and children's centres has been restricted by budget cuts to local authorities (OHA, 2021), which has led to a rise in childhood obesity levels (Mason et al, 2021).

The UK Healthy Start scheme, targeting diet during pre-conception and pregnancy via healthy food vouchers for those claiming benefits and who are pregnant or have young children, is also failing to achieve its potential. The digital changes to the scheme that began in 2021 have presented multiple challenges for families (Sustain and Food Foundation, 2022).

Over recent years, foodbanks have become ubiquitous across local communities in the UK (Tyler, 2020) as vital resources for families, with over 2400 represented by The Trussell Trust and

the Independent Food Aid Network (Independent Food Aid Network, 2022). Foodbanks are run as, or as part of, charities, often staffed by volunteers, distributing food to those who need it (Tyler, 2020). Foodbanks can have a direct impact on diet in terms of food provision and, less directly, as conduits for dietary advice alongside that offered by health professionals.

The content of foodbank parcels varies, but they tend to feature predominantly tinned, long shelf-life products (Fallaize et al, 2020). If foodbanks can provide good-quality food, this has the potential to positively influence nutritional intake (Neter et al, 2020). Foodbank organisations have provided nutrition-related training (Begley et al, 2020) and have the potential to act as healthy eating educators (Jin et al, 2022).

# Study aim

There are missed opportunities to establish consistent health foundations, but nutrition and diet during pre-conception and pregnancy can have a substantive impact on health and wellbeing during childhood, as well as later life. While previous work has provided a valuable body of evidence, the views of professionals who are working with families has not been a focus; this perspective is crucial so that the challenges faced by those directly concerned can be heard and addressed.

In November 2021, research was commissioned by the Food Foundation to explore:

- The facilitators and barriers to healthy food and diet practices during pre-conception and pregnancy
- How the barrier(s) to healthy diets at this life stage could be addressed
- The changes required to facilitate good food practices.

Ethical approval was obtained from the University of Hertfordshire Health, Science, Engineering and Technology Ethics Committee with Delegated Authority (protocol number: HSK/SF/UH/04840).

# **Methods**

The study adopted a qualitative exploratory approach. Exploratory research aims to gain further insight and understanding into the phenomena under investigation; it does not seek to provide finite answers and can be viewed as 'the initial research, which forms the basis of more conclusive research' (Singh, 2007: 64). Exploratory research is appropriate for

areas where there is little knowledge, with the approach being primarily qualitative in nature (Cormack, 1996).

# Sampling strategy

Purposive sampling was used as it enables the recruitment of participants who have the characteristics required to meet the aim of the study and who are expert in terms of the research focus (Flick, 2020); in this study, this was professionals working in the areas of health, diet, and nutrition (including foodbanks). Key organisations were emailed with an attached participant information sheet inviting involvement from a relevant member of staff. Having narrow aims and objectives, and seeking participants who possess the necessary experiences and knowledge, means that smaller sample sizes are required (Malterud et al, 2016); the focus was on achieving information power (Braun and Clark, 2022).

# Data collection

Focus groups and semi-structured interviews are core data collection methods for qualitative exploratory studies and can be conducted in person or online (Mason, 2018).

Focus groups have become popular in health research because they are thought to replicate the types of discussion that participants may have in other aspects of their lives (Green and Thorogood, 2014). Semi-structured interviews offer the opportunity for key topics to be identified in advance, but also allow a degree of flexibility (DeJonckheere and Vaughn, 2019).

Participants were given the choice of either an interview or focus group. This enabled increased

flexibility (given participants' work commitments) and allowed the professionals to share their experiences on a one-to-one basis or with others (we were aware that as organisations were being represented, a private interview may be preferred). Data collection took place between February and March 2022; all focus groups and interviews were conducted via Zoom and were digitally recorded. Open-ended exploratory prompt questions were drawn up with RF, JM, MF and LW undertaking data collection. The focus groups lasted from 58–72 minutes and the interviews 28-55 minutes. The recordings were sent securely to an established agency which produced verbatim transcripts. Informed consent was achieved via the signing of the consent form or by verbally recording it.

which can mean that an expectant parent is less able to

# Analysis

eat a healthy diet

The interviews and focus groups were treated as one data set. Analysis was undertaken by RF, JM and LW with the thematic analysis framework offered by Braun and Clarke (2006) used:

- 1. Becoming familiar with the data
- 2. Generating initial codes
- 3. Searching for themes
- 4. Reviewing themes
- 5. Defining and naming themes
- 6. Producing the report.

The transcripts were read several times before undertaking initial coding and NVivo (version 12) facilitated this process, with a 'codebook' being generated. This procedure enabled the identification of rudimentary themes, which were reviewed and 'collapsed' before being named. The

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participants' actual words are used to illustrate the themes and to facilitate accurate reporting of the findings (Chiovitti and Piran, 2003).

# **Findings**

The 12 participants represented specific organisations. Some of these were national, (covering the four nations) and others were specific to a particular locality. Data analysis revealed three themes:

- Perceived facilitators of a healthy diet
- Perceived barriers to a healthy diet
- The way forward.

# Perceived facilitators of a healthy diet

The participants thought that expectant mothers need to 'know what a healthy diet is' [P3, FG1]. Some felt that parents share a 'general understanding' of the 'need to eat more fruit and veg and less sugar' [P2, FG1]; however, the knowledge and understanding about what makes a healthy diet varies. Others thought that the emphasis on following specific rules about what was allowed or not allowed during pregnancy overshadowed the importance of trying to follow a healthy eating diet:

'How much do pregnant women really understand what eating well looks like? ... I think it's much more common to be concerned with trying to remember the rules around raw foods and cheese than trying to maintain a focus on what healthy eating looks like.' [P4, FG2]

The participants felt that information played a substantive role in facilitating a healthy diet in pre-conception and pregnancy, but that it needed to be retrieved from credible sources, such as the UK NHS. However, it was suggested that some parents may feel these sites do not always give the detail that they need in an engaging format. This may result in seeking information from other places, such as social media, potentially leading to mixed messages:

'So, they're going to seek messages elsewhere ... I think you do have a challenge in terms of consistency of messages that align with public policy and families and parents, parents-to-be knowing where to go to get that information and which to trust.' [P4, FG2]

The participants felt that one common misconception of expectant mothers (and that of their friends and relatives) was about

portion sizes, with several commenting about 'eating for two' [P2, FG1]. They felt that the perception is that double the food is required to promote the growth of the baby and to meet maternal nutritional needs, promoting a need for improved 'messaging and education around that.' [P2, FG1].

The possible misunderstanding about what comprises a healthy diet can be exacerbated by increased reliance on convenience foods. An example offered by participants was porridge, which may be recommended as a healthy food; however, the 'convenience' version, potentially purchased due to lack of cooking facilities or skills, may not be.

There is widely used front-of-pack food labelling in the UK, but participants were concerned that expectant parents are not able to correctly interpret and make use of this:

'There's the confusion that some bits are red, some bits are yellow, some bits are green. "Oh, there's two greens on there and two reds, that must be fine'". [P3, FG1]

There was a view that advice from health professionals may not always be consistent and that 'conflicting messages' [P12, Int] are challenging for expectant parents. However, it was felt that education about a healthy diet needs a 'whole societal approach, like most public health messages' [P2, FG1] starting in nurseries and schools, with the limited co-ordinated approach now resulting in a lack of cooking skills:

'It's a lack of knowledge and maybe skills of how to cook and prepare the food even once they've bought it.' [P5, FG2]

P5 commented on the cooking courses that are advertised in their local area, and P4 talked about the taste classes for young families, noting that these opportunities need to be readily accessible at times and dovetail with everyday life. Overall, participants felt that nutritional information is limited in the pre-conception and pregnancy period with the main emphasis being on supplements such as folic acid and foods that should be avoided (for example, soft cheeses, and raw and partially cooked eggs).

# Perceived barriers to a healthy diet

Participants spoke about the rising cost of living and the affordability of a healthy diet (*Table 1*). Many people do not have the 'choice to even contemplate a healthy diet or think about what's best for their bodies while they're pregnant' [P10,

# Box 1. The way forward as perceived by the participants

- There is a need for appropriate policy (rather than just recommendations for practice) to be implemented in a timely manner, reflecting a 'joined-up' approach and embracing the needs of families
- Consideration should be given to television advertising of unhealthy foods and the negative impact that this can potentially have
- There is a need for businesses to act ethically and for consideration to be given to the sponsorship and connectivity of events to unhealthy foods, as well as the underlying message that could be portrayed
- There should be equitable access to resources and support across the UK
- There is a need for health professionals to make the most of every contact they have with families, which will require investment in professional services, including training and workforce

Int]. Participants felt that the available advice about healthy eating in pregnancy assumes that people have the money to buy appropriate food as well as the facilities, fuel and finances to prepare it:

'There are a lot of people excluded from having a healthy diet. And there can be a disconnect between the advice that we're giving and the information that is available to pregnant women and families, and what is the reality of their lives. And that's not just the food they can afford but the fuel to cook it and the facilities to prepare it. It's just such a complex picture.' [P1, FG1]

In the UK at the time of the study, a financial benefit (Universal Credit) was available to those who were on a low income or out of work. However, participants were aware of the challenges with this system, such as the lengthy wait to access it and the restrictions; for example, the 'two-child limit' would 'impact on women who are pregnant with their third child.' [P10, Int].

Although accessibility to a healthy and nutritious diet was highlighted by participants, it was felt that this is less of an issue for those on a higher income as they have the financial ability to access food from a range of mechanisms (such as online or travelling to shops further afield). It was perceived that those on a lower income may need to prioritise other factors, such as heating and food for their children, over the consumption of a nutritious diet for themselves and that this process is challenging and stressful:

'Specific advice around what's best if you're just trying to keep a roof over your head or having to make

decisions about whether you eat or heat your home. The mental health pressure that people are under when they're struggling to afford food.' [P10, Int]

Participants acknowledged that another barrier to consuming a healthy diet in pregnancy is the time and energy it takes to prepare. There was an awareness that pregnant women are busy and may have responsibilities beyond their own health; they may still be working and have other children to look after. Coupled with the tiredness often associated with pregnancy, they may be less willing or able to spend time 'cooking something from scratch' [P12, Int] and so depend on convenience foods (which participants felt are less likely to be healthy):

'It's about people's lifestyles as well and how busy they are and whether it's a first-time mum and they're still working, or they've got lots of children and therefore there may be a lot of reliance on buying ready-made food.' [P2, FG1]

In recognising the time and effort needed to prepare healthy food, it was felt that parents need 'tips' about how to make a quick and healthy meal; for example, using a pre-prepared tomato sauce, but one low in salt and sugar.

While foodbank participants were aware of lack of cooking facilities, stating that some expectant parents only have access to a kettle, they also spoke about developing cooking skills among those who use foodbanks. However, they noted a preference of some clients for the provision of ready-made foods, as opposed to fresh produce that would need further preparation and cooking:

'It's not uncommon among people, maybe in their 20s and 30s, we give them some fresh food in the form of meat to be cooked, for example, and they will say, "Have you got anything ready made?"... Not all of them by any means, but we get that kind of pushback. We have offered to use one of our kitchens to do cookery lessons, demonstrations and say, "We'll provide everything. You can make some meals; you can take them home with you" ... no real interest to take that up.' [P8, FG3]

The foodbanks reported trying to provide a balanced diet, but that this can be challenging because of people's food requests and the donations received. Food is frequently tinned and/or packet based; and while it is not unusual for part of the food box to be rejected (thereby affecting the person's diet), there was an

awareness that the priority of foodbank users is to ensure that they provide for themselves and their families:

'Getting a hot meal on the table is more important ... so the convenience aspect of it is appealing.'
[P7, FG3]

It was agreed that a healthy diet is required during the pre-conception and pregnancy period, and that it should continue throughout the life course. While most conversations focused on the woman, the need for the non-childbearing/other parent to have a nutritional diet was also highlighted.

However, participants recognised that those who did not strategically plan their pregnancy have little opportunity to consider nutrition during that time:

'Only a small a percentage of people actually plan to get pregnant; they don't think about the preconception period.' [P2, FG1]

'The research and insights from parents is they don't necessarily think about preparing for a baby necessarily in the same way they prepare for other things.' [P11, Int]

The participants reported that, once pregnant, other factors come into play, including how a parent may feel, and this may have an impact on diet and nutrition:

'The side-effects of being pregnant, nausea and all those sorts of things ... you often feel you just eat what you want to eat.' [P5, FG2]

Overall, the view was that during pregnancy, there is a 'short window of opportunity because you are in contact with health professionals' [P5, FG2] and that this should be maximised.

# The way forward

The need for further policy development was stressed and it was noted that, although there are key publications, these are 'not policy' [P2, FG1] (Box 1). Participants thought that consideration should be given to television advertising and how unhealthy diets are promoted.

In addition, there was a view that businesses themselves should be thinking more ethically and that consideration needs to be given to the products that support and endorse; for example, sports events. A positive example was given in terms of an action by one supermarket:

'It's really excellent to hear that [UK supermarket chain] is now advertising certain items that Healthy Start vouchers could be used for. So, that's a positive in the right direction in terms of supermarkets helping out with this sort of thing.' [P10, Int]

Particularly in terms of pregnancy, it was felt that some of the policies and procedures in place are not wholly supportive of the woman:

'Women are weighed at the beginning of their pregnancy, just once, and that's it. That, I have to say, is a bit of a sore point. A lot of midwives say that a lot of women feel there's a walk of shame to the scales where they get weighed, it gets recorded in their notes, the BMI sticks out there, either they're OK, they passed that test, or they're referred to specialist services.' [P1, FG1]

The view was that there needs to be 'joined-up' thinking in terms of policy development, as well as a more expedient implementation process:

'There's a massive time lag between what science is telling us is bad for our health in terms of diets and the public, how that is put into policy and then translates into public health messages.' [P4, FG2]

Concern was also expressed that there might be inconsistency in terms of resources and facilities across the UK:

'You may come across a woman who is not a healthy weight or doesn't have a particularly healthy diet and some areas you'll be able to refer them into a clinic ... other places there won't be anything.' [P2, FG1]

There was consensus from participants that families require more support to enable them to make healthy decisions; these could come via several mechanisms, such as children's centres and family hubs. It was noted that there is little incentive to breastfeed, as mothers do not get any financial remuneration to support the additional calories and nutritional intake required. It was felt that women also need to feel more comfortable to breastfeed in public:

'There's no incentive for breastfeeding. It's not as if you get any money back or you get extra money towards other foods or towards the woman's own intake or anything ... making people feel comfortable breastfeeding out in public and out and about, and even though the law says they can breastfeed everywhere women still don't feel comfortable breastfeeding everywhere.' [P2, FG1]

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Despite their commitment to the facilitation of breastfeeding, the participants did not offer specific solutions to overcome these challenges.

There was discussion about the need to make all contacts with expectant parents count, using opportunities to promote a healthy diet and nutrition. However, professionals need the knowledge and skills to be able to do this effectively. One participant [P8, FG3] had written an annual question-and-answer section in a health visitor journal relating to diet and nutrition in pregnancy and post-pregnancy with the specific aim of updating this group of professionals. Another had been involved in the training of health visitors:

'We've trained ... around 300 health visitors who are champions for healthy weight and nutrition ... which provides them with six modules around healthy weight and nutrition, starting pre-conceptually right through to how to support a child and family where there's overweight/obesity.' [P11, Int]

It was acknowledged that the role of a health visitor is pivotal in supporting families and enabling them to access services; however, the point was made that many of the health professional direct contacts have been reduced and this has meant that there are missed opportunities for providing nutritional advice.

# Discussion

This study has provided a professional perspective of food, diet and nutrition practices during pre-conception and pregnancy. The findings reinforce the challenges that exist around the provision of information and accessing a healthy diet, especially for those on low incomes. Unfortunately, under-investment and underresource has been identified as a significant issue across health services. Since 2015, there has been disinvestment in health visiting and a decline in health visiting numbers, and public health grant allocations have fallen in real terms from £4.2

billion in 2015–16 to £3.3 billion in 2021–2022 (The Health Foundation, 2021).

The Royal College of Midwives reported last year that England is short of 2500 midwives, leaving existing staff exhausted and burnt out (RCM, 2023). Likewise, dietitians are overworked, under-resourced and thin on the ground (British Dietetic Association, 2020). In addition, leading charities such as Barnardo's (2022) have emphasised the need for a UK government funding review of early intervention support, and Save the Children (2022) reported that 28% of their poll respondents said they will 'struggle to afford food this year.'

The potential for foodbanks to offer nutritional advice was articulated by participants in this study; this finding is particularly valuable given the increased foodbank usage (The Trussell Trust, 2022) and the fact that people accessing foodbanks are experiencing more financial and life challenges that increase the degree of food insecurity (Prayogo et al, 2018).

One option is for health professionals to support foodbank personnel by training volunteers, providing educational resources and offering 'drop-in' clinics – this may then enable those most in need to benefit. However, practitioners would need the time and capacity built into their role and responsibilities in order to achieve this. Participants emphasised the importance of other diet-related measures, such as labelling, sports sponsorship and cooking courses. For example, they shared concerns about a lack of understanding of food labels. This finding is supported by Butcher et al (2019), who undertook an online survey in Australia with 1056 adults who were responsible for the household food shopping. The findings revealed that those who had high-marginal food security were twice as likely to describe a healthy diet than the participants with low food security.

Definitions of what constitutes a healthy diet were found to be non-specific, with the potential to over-emphasise the foods that should be avoided instead of focusing on those that could be included. In addition, there was the potential for the portrayal of mixed messages. This echoes earlier qualitative research (Abayomi et al, 2020) with pregnant women in Liverpool and Ulster, which found that advice was perceived to be inconsistent and lacking in depth.

The current study findings concluded that nutrition information is available from a range of sources including the internet (with or without professional signposting). This concurs with previous research (Lobo et al, 2020),

which found there was an increase in access to online information by pregnant women, with that focusing on healthy eating having risen substantially (18.2% in 2008 to 38.2% in 2018). The study revealed a perception that there can be a lack of readily available, evidence-based, clear information provided in an easily accessible and engaging manner. Brown and Avery (2012) found that information and advice on healthy eating during pregnancy is available from a wide range of non-evidence-based sources; Sidnell and Nestel (2020) reported that the internet may supply incorrect information that may be difficult to understand.

A review (Brown et al, 2019) of 51 pregnancy apps identified few that were high quality, with most containing limited nutrition information that was insufficient for them to be exclusively recommended. Advice predominantly focused on food safety (64.7%), alcohol consumption (64.7%), fish and mercury consumption (60.8%) and caffeine (56.9%); however, some concerning nutrition-related health messages were also identified, including the promotion of fasting behaviours and avoidance of dairy products.

Another review (Bland et al, 2020) of 29 nutrition information smartphone pregnancy apps identified wide variance compared with UK recommendations, and several apps that conveyed inappropriate or potentially harmful information. Consideration needs to be given to how expectant parents prefer to receive advice and support, and using strategies that they feel an affinity with will mean that they are more likely to be positively responsive. Additionally, nutrition information made available to expectant parents and pregnant women should be developed with registered nutritionists and dietitians who are able to provide evidence-based, user-friendly advice (Sidnell and Nestel, 2020).

Participants suggested maximising the contact health professionals have with expectant parents. This is an approach favoured by existing initiatives such as England's Make Every Contact Count (MECC), which aims to change health related behaviour by utilising 'the millions of day-to-day interactions that organisations and individuals have with other people to support them in making positive changes to their physical and mental health and wellbeing' (Health Education England, 2020). The potential application to a healthy diet context is clear, but it requires appropriately educated practitioners who have the confidence and time to discuss nutrition in a sensitive and supportive manner.

The framing of information was highlighted, especially the dominant focus on negative aspects of eating during pregnancy. This has been suggested to lead to an emphasis being placed on the avoidance of illness, rather than an ability to 'sustain and create health' (Morgan and Ziglio, 2007), intimating that people need to 'fail' before support is offered. A more positive, asset-based approach would be to consider people's abilities and capabilities to identify solutions that are focused on their needs, and which enhance selfesteem (the UK Health Security Agency (2022) provides good practice examples). This change in approach could initially be more labour intensive, but longer term could lead to a lower dependence on services.

Participants shared that they felt the adoption of a life course approach to healthy eating was required and PHE (2019b) suggests this begins at pre-conception. While both government policy and findings of this study advocate for similar strategies, participants revealed that they thought this is not happening in practice; therefore, there needs to be a strengthening of resources, as well as the supporting infrastructure.

One of the key and recurring aspects needed to facilitate this is government investment in terms of expansion and training as this would allow health professionals, such as health visitors, to develop their nutritional knowledge and skills and enable them to deliver high-quality support to parents and families. A failure to provide this financial commitment could have a negative impact on the health and wellbeing of both our current and future population.

# Strengths and limitations

The participants were from differing professional backgrounds and there was a variance in their roles, with some being client-facing and others not; therefore, it is acknowledged that this could have had an impact on the findings, as some had more direct experience than others. The sample size was small and participant views may not have been reflective of those of their colleagues. In addition, some participants may have contributed differently if they had been involved in a focus group rather than an interview (and vice versa); nevertheless, there was value in giving choice and flexibility, which might otherwise have precluded people from taking part.

As some Covid-19 pandemic precautions were still in place, all focus groups and interviews were conducted via Zoom – this could have affected data collection as face-to-face engagement was reduced and connectivity issues occasionally arose.

Qualitative research can be associated with subjectivity and an accompanying bias. To enhance the trustworthiness of the findings, a reflexive approach with a clearly documented audit trail was adopted throughout the study. Regular meetings were held between the research team and the Food Foundation, who were able to provide an ongoing objective and questioning assessment of the study.

# Conclusion

The importance of eating a healthy diet in the pre-conception and pregnancy period has been well established, but achieving this is not without its challenges. Some of this is related to the individual person's ability and capability to prepare nutritious food at a time in their lives when there are additional stresses and strains. Despite this, the over-riding challenges are related to affordability and the provision of professional advice that enables expectant parents to obtain information that has direct relevance to them, their family, and their needs. Unhealthy diets put future generations at risk of health problems including malnutrition, obesity and associated co-morbidities, and we owe it to our children to JHV give them the best possible start in life.

# This article has been subject to peer review.

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