National Centre for Social Research

d3food Project Focus Groups

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Executive summary

The recent Covid-19 pandemic and lockdown across the UK has led to significant changes for the majority of the UK population, including changes to how we source and eat food. This report presents findings from a series of focus groups held with members of the public in July 2020, to better understand the challenges of sourcing and preparing food in lockdown.

Methods

The research took place as part of the **'Data, Disruptions and Disparities in the Food System' project** (the 'd3food project'). A total of four focus groups were held in July 2020. There were 30 participants from across England, Scotland and Wales. Each group consisted of six to nine participants. Each focus group represented a social group that may be more likely to experience disadvantage:

- Older adults;
- Low-income individuals and families;
- Single parent families; and
- Black, Asian and minority ethnic (BAME) groups.

Each focus group discussed the following topics: changes to shopping and eating habits (including environmental and health impacts); challenges with sourcing food during lockdown; how participants adapted to these challenges; and feedback on 'feeding the nation' policies and government assistance. The discussions were audio-recorded and transcribed, with the Framework method used for the analysis of findings.

Perceptions of food supply and demand

Changes to habits for sourcing food
Online shopping increased, with priority status given to or obtained by many older adults or respondents with health conditions. Online shopping was felt to be helpful but did not meet all of respondents' needs. Those elements raised as challenges included inappropriate substitutions, a lack of delivery time slots, and a lack of any delivery in rural areas.

A wider variety of shops were used by respondents during lockdown, including online retailers, smaller supermarkets, corner shops and farm shops. This was based partly on availability of produce and a desire to support local businesses, but also drew on concerns about the safety of attending larger supermarkets.

For many, lockdown led to a greater sense of community, with respondents reporting that they shopped for neighbours, friends and family during the pandemic.

Changes to what participants were buying and eating
Respondents reported temporary shortages of grains, flour, tinned tomatoes, vegan specialist products, fresh fish and budget or cheaper product lines. However, there were rural variations, and rural and coastal areas were felt to have a steady supply of food. Bulk buying was reported by several respondents, who reported stocking up only on essentials, especially when following restrictive diets such as veganism.

Cooking at home increased, including buying fresh food and freezing it for later consumption. Takeaway consumption, and therefore spending, decreased as more takeaways were closed. Food expenditure increased for some, who were unable to find cheaper products in store.

Experiences of policies to improve food supplies
Respondents were aware that there were limits in place during lockdown, such as purchasing a limited number of items. Attitudes towards these policies were mixed. Other supermarket policies, such as using one-way markers, restricting the number of people in stores, and wearing masks, were noted by respondents, but for many, such processes were not sufficient to encourage returning to supermarkets.

Feedback on organised assistance
Participants found that support was available from several sources: local authorities, national government, and community groups. Respondents who received financial support, including Universal Credit, food vouchers or food boxes for children on free school meals, reported this positively. However, for others, food parcels were seen as unnecessary for some who had received them. For respondents who were offered but declined support, this was due to a lack of culturally appropriate food or because family members were better placed to support directly.

What would have eased any difficulties sourcing food
There were several measures that supermarkets could have introduced to support people to access food, including sharing data on which periods were busiest and stock availability, providing childcare for lone parents, constructing shelter outside for those queuing and offering more online delivery slots.

Respondents also felt that the government could have improved its messaging regarding bulk buying sooner, to counter discussions on social media about empty shelves. This may have decreased bulk buying by reassuring the public that food supply chains were secure.

The impact of Covid-19 on sustainable diets

Producing and sourcing food
There was an increase in locally grown foods during lockdown. Respondents reported growing their own herbs and vegetables and making their own bread and pasta. Few respondents noticed changes to the origin of food produced during lockdown, although some felt that food was coming from further afield than prior to lockdown.

Shopping locally
Respondents reported visiting a greater variety of shops during lockdown, including corner shops, village stores, smaller and/or independent supermarkets, farm shops and butchers. This supported local businesses, and many respondents reported being able to find the majority of their supplies in smaller stores, although there were resulting cost implications.

Food packaging
Plastic use increased during lockdown for many participants, who identified this as an area of concern. This was the result of items previously sold ‘loose’ being pre-packaged in plastic, the closure of some Asian grocery stores frequented by respondents, and an increase in online delivery.

Consumption of meat and dairy
Few respondents mentioned a deliberate reduction in their meat or dairy consumption during lockdown, although several maintained a pre-existing vegetarian or vegan diet. Changes to consumption were likely due to changes in shopping habits, such as being unable to obtain specific types of fish or meat due to store closures.

Food wastage
Respondents reported an increase in food wastage during lockdown, with several reflecting that bulk buying at the start of lockdown had led to increased wastage. Online shopping was also partially responsible due to the use of 'substitutions' which were often inappropriate (such as meat products sent to a vegetarian).

Healthy eating

Positive changes
Respondents found that they were cooking and preparing food more during lockdown. This was for three core reasons: planning meals in advance was required to avoid shopping too frequently or forgetting items; cooking was a way to avoid boredom; and extra time at home meant that people felt more creative. This was viewed positively as a way to maintain a healthy diet. Other positive changes included eating lighter lunches or evening meals instead of eating takeaway food at work; cutting down on snacks due to fewer trips to the shops; and eating less takeaways when restaurants, cafes and takeaways were closed.

Negative changes
Others found it more difficult to eat healthily, especially when regular staples, such as rice and pasta, became unavailable. Additionally, some respondents found fresh produce rose in price.

Increased snack and alcohol consumption
Despite an increase in 'cooking from scratch', respondents reported consuming more snacks and alcohol during lockdown, due to the convenience of being at home and being within easy reach as well as increased boredom. However, there was evidence that these behaviours were changing among respondents.

Changes to health priorities
Two main changes to health priorities were identified. Firstly, for a number of respondents, lockdown led to an increased prioritisation of health, especially for older adults and the BAME group. A healthy diet was seen as a way to improve immunity and avoid the health risks. This was related to an awareness that being overweight could increase the severity of Covid-19 symptoms.

However, for others, food was seen as a source of self-care and comfort, particularly for respondents who had been bereaved. Lockdown was not the time for "*counting calories*" for these participants.

Support to improve diet during lockdown

There were differing views on the support required to improve diets during lockdown. For respondents unable to access some of their usual sources of fresh produce, better access to this food would have been helpful in improving their diet. Others felt that information from the government, shops and media would have been useful. Some were unable to suggest any support that may have been useful, perceiving that their diet did not need improvement.

Sustaining change

While respondents had faced different challenges during the lockdown period, for many, there was a desire to maintain some of the changes established during this time. Online shopping was often viewed as more convenient than returning to stores, especially for those who were in a high-risk group and/or were concerned about safety. Other habits to sustain included shopping less frequently and continuing with healthier cooking routines, such as batch cooking healthy meals, trying new recipes and

reducing junk food consumption. Saving money by eating and drinking out less was also mentioned.

However, for some, not all changes made in lockdown were desirable. For example, some respondents wanted to reduce their alcohol consumption and also return to socialising more with food.

Expectations of the food system over the next 12 months

Finally, respondents had both positive and negative expectations of the next 12 months. Positive expectations included improved safety measures in supermarkets, a growth in the number of consumers wanting to shop seasonally and buy eco-friendly products, and a stronger economy after Brexit, which could reduce the cost of foods. Negative expectations included an increase in food prices after Brexit due to changes in trade agreements, the risk of losing workers for fruit and vegetable production if immigration rules change, and greater risk of Covid-19 infection at supermarkets.

1 Introduction and background to the research

In May 2020, the University of Oxford commissioned the National Centre for Social Research (NatCen) to undertake research exploring experiences of accessing, purchasing and consuming food during the recent Covid-19 pandemic and lockdown in the UK.

The research took place as part of the **'Data, Disruptions and Disparities in the UK Food System' project** (the 'd3food project'). This project was developed by the University of Oxford, University of Leeds, London School of Hygiene and Tropical Medicine, University of Southampton, and the George Institute, and funded by the UK Prevention Research Partnership (administered by the Medical Research Council). The overall aim is to study the UK food system, how the food system responds to adverse or unexpected events (including Covid-19), and how to ensure a reliable flow of healthy and sustainable food that is accessible and affordable for the UK population, particularly its disadvantaged groups. Within this project, four main social groups who are more likely to experience greater disadvantage and greater difficulties accessing and affording food were identified:

- Older adults;
- Low-income individuals and families;
- Single parent families; and
- Those from Black, Asian and minority ethnic (BAME) groups.

The findings that follow in this report are generated from four focus groups held in July 2020 with 30 participants from across England, Scotland and Wales. Each group, consisting of six to nine participants, was sampled to represent one of the four groups above. Findings encompass: those changes to shopping and eating habits (including environmental and health impacts); challenges with sourcing food during lockdown; how participants adapted to these challenges; and feedback on 'feeding the nation' policies and government assistance.

2 Research design

2.1 Research aims and objectives

The overall aim of the focus groups was to gain insight into public experiences of the UK food system during the Covid-19 lockdown. More specifically, the research had the following aims and objectives:

1. Identify the challenges that disadvantaged groups face in relation to food procurement for their household due to Covid-19:
   - Explore what would have eased any difficulties during the lockdown;
   - Gather feedback on any government or local authority assistance that was received; and
   - Assess the perceived impact of retailers' Covid-19 'feeding the nation' policies.

2. Learn how individuals attempted to ameliorate/adapt to these challenges:
   - Identify whether any behavioural changes resulted in unintended and/or unexpected behaviours.

3. Assess whether there were any factors relating to the lockdown that facilitated a healthy diet:
   - Explore whether there were any factors relating to the lockdown that promoted a less healthy diet; and
   - What could have been done to help people exploit any lockdown difficulties and use them as an opportunity to improve their diet.

4. Explore whether there were any factors relating to Covid-19 that modified the environmental impact of their diet (such as reducing the use of plastic packaging; changes in the consumption of meat and dairy products, or eating more locally sourced foods).

5. Examine the longevity of changes as a result of lockdown:
   - Which changes would participants like to sustain; and
   - Which changes would participants like to end.

6. Identify individuals' expectations of the food system over the next 12 months.

2.2 Methods

2.2.1 Sampling and recruitment

To recruit the focus group participants, we drew on respondents to the NatCen Panel, a research panel of approximately 15,000 people who have agreed to take part in social research on an on-going basis. The following criteria were used to identify panel members eligible for each of the groups:

- **Older adults**: panel members aged 70 and over.
- **Low-income individuals**: panel members who reported a monthly household income below £1000 a month or were 'just about getting by, finding it quite difficult, or 'finding it very difficult'.

- **Single parents**: panel members who lived with children and without another adult.
- **Black, Asian and minority ethnic individuals**: panel members who were not of White British or other White background.

Potential participants were sent an email which provided them with information about the project and invited them to contact a researcher at NatCen to undergo a short briefing and screening phone call, before being invited to attend a focus group. Following the call, eligible potential participants were sent a combined consent and information sheet to be returned in advance of their focus group. They were also asked to complete a short online questionnaire to provide some further details about their living situation and understanding of healthy food and sustainable diets. Dates and times for the focus groups were arranged in consultation with participants.

Each focus group of six to nine persons consisted of either single parents, older adults, people of Black, Asian or minority ethnic (BAME) identity, or those on low incomes as detailed in table 2:1 below.

Table 2:1 Focus group characteristics and participant numbers

Primary characteristics	Number of participants
Older adults	9
Low-income individuals	8
Single parents	7
BAME individuals	6
Total	**30**

2.2.2 Focus group delivery

Focus groups were conducted via the online platform Zoom, and each group was facilitated by two NatCen researchers. Sessions took the form of facilitated group discussions, with facilitators introducing topics and providing prompts, allowing conversation, questioning and challenging of opinions within the group while managing discussion of sensitive issues.

Sessions were structured around the topic guide included at **Appendix A**, with topic areas including: changes to shopping and eating habits during lockdown; difficulties with household food procurement; feedback on government and local authority assistance; and how individuals adapted to changes. Prior to each focus group, a questionnaire was also circulated which asked participants to define a 'healthy diet', and what 'sustainability' in relation to diet meant to them. Responses were reviewed prior to the focus groups to factor these participant understandings into the discussion. With the permission of participants, all Zoom calls were audio-recorded, although no video was captured. Recordings were transcribed verbatim.

Following the focus groups, participants received an incentive of £30 (in vouchers) and a debriefing leaflet with a list of support organisations. This leaflet included a particular focus on organisations offering support to people during the lockdown.

Table 2:2 shows the composition of the four focus groups. While participants were allocated to a group on the basis of a primary characteristic, some participants belonged to multiple groups of interest to the study.

Table 2:2	Focus group composition			
	Focus group 1: Older people	***Focus group 2: Low-income***	***Focus group 3: Single parents***	***Focus group 4: BAME***
Number of participants	9	8	7	6
Age range	70+	20s – 60s	30s and 40s	20s - 40s
Gender	5 Male, 4 Female	4 Male, 4 Female	1 Male, 6 Female	2 Male, 4 Female
Ethnicity	White British or other white background	White British or other white background	White British or other white background	Black Caribbean, Indian, Black African, Pakistani and other Asian
Household composition	Single or multiple adults; no children at home	Single or multiple adults; some with children at home	Single adults with children at home	Single or multiple adults; some with children at home
Low-income	Yes/no	Yes	Yes/no	No
Regions	Wales, East Midlands, South East, South West	North West, Wales, Scotland, East Midlands, West Midlands, South East	North West, East of England, Scotland, East Midlands, South East	North West, East of England, Scotland, London

2.2.3 Data analysis and reporting

We used the Framework method[1] to analyse the focus group data. This involved development of a thematic coding framework (see **Appendix B**) that reflected the key research questions in the topic guide. Within the framework, the column headings relate to key topics, and the rows to each focus group. Data from each focus group was then summarised ('charted') in the relevant cell, alongside selected verbatim quotations from participants.

The Framework method facilitates a systematic and comprehensive approach to data interpretation. Following charting of the data, the final analytic stage involved working through the framework, drawing out the range of experiences and views, identifying similarities and differences and interrogating the data to seek to explain emergent patterns and findings. The framework allowed the exploration of themes across all focus groups, enabling researchers to draw out similarities and differences in experiences and opinions. Findings are reported thematically below.

2.2.4 Ethics

This research was approved by both the NatCen internal Research Ethics Committee and the University of Oxford Research Ethics Committee.

[1] Ritchie et al. (2014). Qualitative research practice. 2nd ed. London: Sage Publications

3 Results

3.1 Perceptions of food supply and demand

Due to the Covid-19 lockdown, respondents identified changes to their normal routines of shopping, eating and cooking food. This section discusses: changes to how people shopped and obtained food; differences to cooking and eating habits during lockdown; and perceptions of local authority, community and government support.

3.1.1 Changes to habits for sourcing food

Respondents reported a number of changes to sourcing food during lockdown. This included shopping online, using different shops to those previously frequented, shopping with family members, and shopping less frequently.

Shopping online

Participants who had previously visited shops in person began to shop online. This was particularly common among older adults, with some members of this group given priority status due to their vulnerability which they "*gratefully accepted*" and felt "*fortunate*" to have. While some older adults were offered priority status by the supermarkets, other older adults or those participants with health conditions, contacted the supermarkets to request priority status. Those who had contacted the supermarkets were able to obtain priority status, although one participant explained that this process had taken some effort:

> *I shop at Sainsbury's… and I got through eventually to their help services during the night. I find the night staff are working from home and are usually quite helpful. A fellow disabled person spent quite a lot of time getting me back on to the list. (Low-income participant)*

There were also younger participants who started shopping exclusively online, including those who identified themselves as being part of a shielding household and did not want to put themselves at risk in a supermarket. In supplementing supermarket deliveries, some participants also started using specialist online suppliers who sold a small range of products like fresh meat, or local shops which started to deliver during the lockdown period.

Those who started shopping online had mixed experiences. Participants missed the ability to be spontaneous when shopping in person and older adults found the ordering process could be time-consuming and lead to errors, particularly for those who had not shopped online before:

> *I do find it very frustrating that I can't look around and pick and choose and change my mind when I'm actually out shopping if something looks better than something that's on the list…You can't look at a cut of beef and say, 'Well, actually I don't think - I think I'll fancy the lamb this weekend.' You've put beef on the list and that's what you get, good or bad. (Older adult participant)*

However, there were also positive experiences. Some participants enjoyed sourcing items online and found this easier than shopping in store. For example, one participant commented that it was easier to swap products online and older adults found that being able to see their order history helped them remember what items they needed:

They have a very useful thing that, when you've got your order, you can then compare it with what your previous order was. It tells you things that you ordered a week ago which you hadn't reordered, and that's quite useful. (Older adult participant)

The issue of substitutions was raised across all four groups. Some had been annoyed when they were sent the wrong items and commented that swaps were “slightly bizarre”, such as cheese swapped for hummus, or did not take into account dietary choices, with one participant giving an example of a vegetarian friend who was sent meat pâté. Others found that they ended up throwing food away because delivery drivers were not allowed to take items back due to contamination risk. However, substitutions were also often regarded as a minor issue which some found could be addressed by requesting early morning delivery slots when stock was highest or switching off the online option for substitutions. One older adult also commented that it was a nice opportunity to try new things.

Views about delivery times also differed between participants, with some finding it easier than others to secure convenient time slots and one participant commenting that it was very difficult to change a delivery slot *“unless you want to take the risk of starting again*” (Older adult participant). Across all groups, there were experiences of trying to shop online but being unable to get a delivery slot or having a slot cancelled. This included those who had previously shopped online, forcing them to visit shops in person. For some who had regularly used online suppliers this perceived lack of recognition for customer loyalty was a disappointment:

All of a sudden, they've said, 'Oh, there's too many people online, we can't take it; you'll have to come along next week.' I thought that shops would actually take note of their regular customers who've stayed with them for years, and not just treat them as any old customer. (Low-income participant)

One participant also found that few supermarkets delivered to their rural area. Some participants did not attempt to shop online because they had heard that all the slots were full or did not want to take up a delivery slot that could be used by a more vulnerable person. Others were put off by previous experiences or the experiences of friends and family and referred to finding it hard to search for items online, undesirable substitutions, bruised fruit and vegetables and the charge for delivery. In the low-income group, participants also commented that online shopping was not a social experience:

I think the aspect of shopping is that it is somewhere to meet people when you live alone, an interaction. I think that's quite an important part of people's shopping habits. (Low-income participant)

In addition to delivery services, participants also used click and collect. Some found this to be a good alternative to online shopping, with more convenient pick up times but groceries being brought to the car to minimise transmission risks. However, for others who did not live near the supermarket this was not felt to be an economical or practical solution.

Using different shops

Across all groups, participants also made changes to the stores from which they bought food, with some deciding to shop more locally or use smaller shops, markets and specialist stores. Reasons for making these changes varied but included alternative retailers being better stocked, cheaper or having smaller queues. For example, two older adult participants found that they were able to source flour from local shops, bakers and mills when this was unavailable at larger supermarkets. For

one participant who had previously travelled to the supermarket by taxi, local shops were a better option to avoid using public transport. For another participant, a parent who previously shopped online but could not get a delivery slot, smaller local shops were more accessible for their autistic child:

> *I have a wee one with autism who just cannot manage supermarkets, and then when all the slots were being filled up, it meant that we've only really been able to manage the very local shop…yes, just not an option for the supermarket and the one-way. (Single parent participant)*

Safety was also important, with one participant explaining that they tried to stay away from stores without robust measures in place:

> *They had no idea on sanitising, they had no idea on organising people when they're actually in the shop. Quite honestly, they [supermarket chain] really didn't seem to care about anything to do with numbers of people in the shop at the time. That, to me, were the factors in where we now shop, because safety is still important. (Low-income participant)*

Other participants continued to shop at supermarkets but chose which store to visit based on the queue size, finding that "*it's not necessarily the ones you would choose normally" (Low-income participant)*. Changing the range and location of shops visited was particularly common among BAME participants and their friends and family, who would previously have travelled further and visited more stores to acquire specific items at cheaper prices. Participants described how they now limited the number of shops they went to and just shopped at the local stores:

> *We were definitely sticking to the local stores rather than travelling that little bit further to pick up items, even if we were paying more for it. (BAME participant)*

Within the BAME group, participants also described shopping exclusively in supermarkets during lockdown, which limited the specialist foods they were able to buy:

> *I found that whilst there were stores like Sainsbury's and Tesco who were open, they have a very tiny world food section. Normally, I would go down to my local Asian store, where I can get the kind of things that are already part of my diet…You're not necessarily going to be able to find certain things, like creamed coconut, at Sainsbury's. (BAME participant)*

Involvement of others in shopping routines

Participants described how friends, family and neighbours helped them with sourcing food, either shopping for them or dropping off home cooked meals, food produced or grown at home such as vegetables and eggs or food parcels. Several participants mentioned the importance of having family living nearby who could support them, particularly given lockdown restrictions which prevented travel. In some cases, participants received support because they were at increased risk. However, others described more sporadic arrangements where neighbours would check in before they went to the shops or "*keep their eyes out*" for hard to source products. Among older adults and low-income participants, there were feelings of guilt or of being a burden associated with the idea of others doing their shopping. One participant who was able to source food through food delivery services, explained that they preferred not to ask for help:

I've got family locally but I tried to - well, I did - avoid using them because they've got busy lives and have to look after themselves. (Older adult participant)

Participants also described supporting others with sourcing food, checking if family, friends and neighbours needed anything before shopping and supplying provisions, both shop-bought and home cooked, to those self-isolating as well as the wider neighbourhood.

A strong theme across all four group discussions was reciprocity or mutual support, with participants describing both giving and receiving support. This included neighbours, families and friends checking in on each other, shopping for each other, swapping food and plant cuttings, and alerting each other to delivery slots and local supplies. Some participants commented that such arrangements had to some extent existed prior to the lockdown, (e.g., neighbours swapping plants), but for many these were a new development. All participants were positive about these arrangements and how well their systems worked. One participant found that bartering was particularly effective, given precautions around handling money and food:

Because cash was no longer really a viable thing with the virus and you can't hand Ocado to your neighbour, then essentially we came back into bartering [chuckling]. It was, 'If you can go and get me those then I'll give you these.' This worked so well. (Low-income participant)

While opinions differed as to whether neighbourhood networks would continue, participants were all positive about the impact of these arrangements on community spirit and bonding:

Bartering was brilliant... I think we'll do it forever! (Low-income participant)

I think there's an increase in community spirit now. (BAME participant)

Participants acknowledged the key roles of the internet and social media in connecting people during lockdown, although some also referred to support being offered in person (for example, notes being put through doors to ask if people needed help).

Other changes to shopping habits

Participants described shopping less frequently during the lockdown. Reasons included finding shopping a "*chore*" because of long queues, following government restrictions regarding leaving the house, and being reluctant to visit shops due to the health risks. To ensure they could buy everything in one go (either in person or online), participants also described planning their shopping or meals more than they did before lockdown. In the low-income group, it was noted that shopping less frequently could result in people going without, as it was easy to forget something. However, within the BAME group, participants found that the additional planning required helped them to avoid buying unnecessary items.

Across all groups, participants varied the times that they shopped, visiting stores in the late evening or early morning to try and avoid the queues, or go when stock was highest. For example:

I've got a small Tesco nearby: I was getting up at 6:30, really early, to get there for when they opened at 7:00 because I knew it'd be quiet then and I could get what I wanted. (Low-income participant).

Some older adults also described new routines for handling shopping, involving washing or quarantining food and using gloves to handle groceries and deliveries. Finally, some people made no changes to their shopping behaviours. This may be dependent on employment and previous habits as one participant explained:

> *For me, there's not much difference, there's nothing different during lockdown because even before lockdown, we always do meal planning and then we just do shopping once a week. I'm still doing that, even the lockdown, because my job is one of the key workers, so nothing different. I still have to go out anyway, so on the way back from home, I just pop in, do the shopping, do my shopping once a week. There's nothing different. (BAME participant)*

3.1.2 Changes to what participants were buying and eating

Availability of food

While some participants noted an increase in vegan or vegetarian food, others highlighted several products that they were unable to source. This included dried or tinned products including grains, flour and tinned tomatoes, specialist products such as oat milk and egg substitutes, and fresh fish. Budget or cheaper products were also unavailable for some.

Participants suggested that products were unavailable for several reasons, including the impact of bulk buying, packaging issues in warehouses and people doing more home cooking during the lockdown period. However, there were rural variations, with some experiences of well-stocked shops. Specifically, participants suggested that rural or coastal areas had good sources of food, and described experiences of village shops being well-stocked:

> *I live in a rural part of [the UK] … so I use my local shops more. I have a local butcher and a local veg shop, so they still were fully stocked. They didn't really run out of anything. (Single parent participant)*

For some who did experience shortages, these were only temporary: shops were fully stocked within a few weeks of lockdown, or they found that the problem had lessened by the time the focus groups were held in July 2020.

Bulk buying

Some participants had engaged in bulk buying prior to lockdown, either as a response to the media coverage around Covid-19 or Brexit, or because this was part of their usual shopping routine. For example, one participant explained that the shops they tended to use often sold items in bulk:

> *If you go to many of the Asian grocery stores, you'll see that actually most of the volumes of, say, the pulses, lentils, flours, always comes in ten-kilogram, 20-kilogram bags. (BAME participant)*

However, other participants started bulk buying during the lockdown, including those who had tried to avoid it because they did not want to compromise the opportunity for others to purchase food. Participants primarily stocked up on staple products such as pasta and other long-lasting items. Some single parents bought in bulk to ensure that they could cater for allergies or specific diets and used these ingredients to batch cook multiple meals. For example:

Because of allergies we tend to cook from scratch a lot, so just making sure we had pulses, lentils; things that I knew we could make reasonable meals out of but also really stretch it out. Just had stuff in the freezer, just trying to make sure that we had enough chicken thighs to make a massive pot of soup, things like that. (Single parent participant)

Participants discussed various rationale for bulk buying when reflecting on their own habits and those of others, including the impact of shopping less frequently and responding to product shortages and the "*panic"* around limited supplies. One participant suggested that social media had made the problem worse because people would share online that shops were low on particular items, encouraging others to stock up.

Other participants did not start bulk buying. For some, this was due to concerns over the negative impacts on food availability, but for others it was because they were unable to do so. For example, participants recounted being able to source only small quantities of food or of seeing their shopping bills increase, preventing them from buying additional food.

Cooking at home and buying takeaways

Some participants focused on buying basic ingredients and described cooking more at home during lockdown or baking with children. It was perceived that there had been a general increase in cooking from scratch, which impacted on those for whom it was routine to cook meals from scratch or make their own bread. One participant explained:

We cook a lot from scratch and I found things like tinned tomatoes were all gone. I was like, everyone wants my diet! Go back to eating what you were eating before please, there's no food for me! (Single parent participant)

However, among single parents and older adults it was also acknowledged that this change would have been forced upon some families, who may also be struggling to adjust. It was suggested by one older adult that this would be much harder for younger people and families who were less likely to have grown up cooking from scratch. Some participants increased their consumption of fresh food, starting to grow fruits, vegetables and herbs in their gardens, foraging in local woodlands and sharing plants between family, friends and neighbours. For one parent, their child's school had encouraged this as part of the home-schooling curriculum. In contrast, some participants increased the amount of frozen food they bought during lockdown to ensure they had a consistent supply, for example:

I've certainly found that I'm probably not eating as much fresh food, I guess. If I'm buying vegetables from the supermarket then I'll tend to buy frozen peas, frozen carrots, frozen broccoli - whatever - and just then I know I can buy them and then not have to worry about buying any more. (Low-income participant)

Others bought fresh food and froze it to maintain their supply. For one participant this led to a diet change because they felt wary about freezing fresh fish, which they had previously consumed regularly. While some participants drove around to find products that they wanted, others described "*making do*", settling for alternatives and learning to be more creative with what they could get and adapt their meals, which many found an enjoyable challenge. Alongside an increase in home cooking, some participants had reduced their takeaway consumption during lockdown, finding takeaways shut and/or making meals they would usually buy as takeaways at home. However, other participants commented that local restaurants quickly started doing food delivery and some found that their takeaway consumption increased as a result.

Changes in food expenditure

Some participants experienced an increase in food expenditure. In part, this was thought to be the consequences of bulk buying, which restricted availability of the cheapest products and budget brands, forcing participant to buy more expensive brands:

> *Financially it made a difference because people have bought the budget basics. They've all gone, so it's all the brands that might be left. (Single parent participant)*

Reduced availability also caused some participants to attempt to source products from other suppliers, such as online specialist suppliers whose prices were higher. Other participants also found online shopping to be more expensive because of the delivery charge. Changing shopping habits by reducing stores visited, or shopping more locally, could also be more expensive. However, participants also pointed to changes made by the supermarkets with some suggesting that supermarket prices had increased with fewer multi-buy offers or discounts available. While some participants weathered the increased expenditure, others found ways of tackling this issue, for example, finding online grocers and markets which provided cheaper alternatives.

In contrast, other participants found that their food expenditure decreased. Some were experiencing savings from making food and coffee at home, rather than buying items ready-made. Others found that shopping less frequently, and shopping as a family rather than individually, reduced their food bill. One participant also found that limiting their shopping to core supermarkets made them more likely to just buy what was necessary:

> *What I actually found was that, because of the lack of shopping facilities open other than the base supermarkets, I wasn't buying all the little extras that I used to buy - which sometimes used to end up being chucked because we decided we didn't like it. (Low-income participant)*

3.1.3 Experiences of policies to improve food supplies and make shopping safer

Feedback on specific policies

Some participants had been restricted from buying more than a certain number of any one product. In most cases restrictions applied to specific food and non-food items such as tins of beans, eggs and toilet roll. However, one participant was limited to only buying three of any item in one store. These restrictions were particularly difficult for certain groups, such as those shopping for multiple households and larger families. One participant explained how this resulted in changes to the way they fed their children:

> *Because I've got four kids and they limited it to three items maximum of anything, if we wanted to get something for all four kids, we couldn't because we had to get three - and that was it. So we had to say which ones can get [chuckles] - I know it sounds horrible - but one of them would go without. (Low-income participant)*

Attitudes to this policy were mixed. While the participant quoted above found their children to be understanding of the restrictions, and others said they understood that the measure was a response to bulk buying, still others questioned the sense behind the numbers chosen:

> *It just seemed to me a very arbitrary number and I don't know how much of it was grounded in actual people's practical experience. (Low-income participant)*

Some participants also found ways around these limitations, re-entering shops to buy more items or sourcing food from multiple shops.

There were also varying experiences of one-way or social distancing markers in shops. Some participants found these a helpful reminder to reinforce social distancing. However, others commented that the arrows did not seem to follow the logical path around the shop or take consideration of people who only wanted to buy a few products and then leave. Participants also had mixed views as to whether shoppers were following the measures. Some felt that most people were adhering to the rules, while others had experiences of shoppers ignoring the new systems, causing some nervousness and frustration. Participants discussed the need for behavioural change in order to abide by the rules. For example, older adults commented on the need for patience to deal with the new measures, waiting for others to make choices and handling narrow aisles which make social distancing difficult. One parent with an autistic child also chose not to shop at large supermarkets, due to a concern that her child would not be able to follow the new one-way system.

Participants had also experienced restrictions on the numbers of people allowed to enter shops, often with the resultant impact of long queues outside stores. However, some participants had also been asked not to enter shops with children or partners, or had seen others asked not to enter with elderly relatives:

> *I was actually asked if I could leave my child outside the shop … like a dog. I was like, no. (Single parent participant)*

Some participants had been asked to sanitise their hands when entering a shop, and to wear masks. Views on wearing masks were mixed, with some taking the initiative to wear one and being surprised that more people did not do likewise or that the government had not mandated this.[2] For one older adult who had recently returned to the supermarket, wearing a mask was a measure to improve personal safety, whereas others also felt this was important to protect other shoppers. However, other participants felt strongly that mask-wearing should not be enforced and was not necessary.

Participants in key worker roles discussed policies put in place to help them specifically, such as priority shopping times and queue jumping. For the most part, participants had not taken advantage of these policies because they found key worker slots at shops too busy or could not shop at these times due to childcare or shift arrangements. One participant living in a rural area also did not feel that the queues were big enough to justify skipping them.

The overall impact of measures on the shopping experience

As described above, participants were aware of, and had experienced, various measures implemented by shops to improve safety and supplies. However, some participants without first-hand experience felt their knowledge of the measures was more limited because they had limited their news intake, while others had felt ill-informed about the current state of restrictions given the pace of policy change in this area.

[2] At the time of the focus groups, wearing masks was not compulsory in shops in England, Wales or Northern Ireland.

While there were positive comments about the changes, with some participants stating that they were comfortable in the shops and found measures reassuring, others still described feeling vulnerable and not wanting to visit stores in person. This was particularly common among older adults, one of whom commented:

> *I'd rather not go to the supermarkets at all because I feel very vulnerable, but you have to eat! (Older adult participant)*

In part, this vulnerability seemed to be linked to a broader fear of interacting with others, particularly for those in high risk groups. However, these feelings also appeared to relate to experiences of the measures, including concerns about whether supermarkets had robustly implemented social distancing measures and non-compliance of other shoppers. As one participant explained, a combination of these concerns led to fear around shopping:

> *I find that I'm extremely nervous going into the shops - not just because of my condition; because I've got elderly parents as well. You just find that people are ignoring the two-metre rule totally. You turn [a]round in a shopping queue and there's somebody right up next to you, behind you. (Low-income participant)*

In the older adults' group, many participants were not visiting stores and, were influenced by the views and experiences of those close to them. For example, one participant commented:

> *My daughter was very distressed after going into a very crowded Marks & Spencer, which had very narrow aisles, and felt that she was actually in danger at various points. (Older adult participant)*

Narrow aisles or streets were described as an issue by several participants, which reduced the effectiveness of safety measures. One participant spoke positively of how their local Council had blocked off the roads to traffic between 11am and 4pm each day, to allow people to maintain social distancing where there were narrow pavements. Participants also experienced tension and conflict in shops as a result of the new measures. This involved altercations with other customers over observing the rules and viewing other shoppers arguing with each other and with staff about the measures. Participants acknowledged the variation between supermarkets, in terms of the extent to which they had implemented measures to improve food supplies and improve safety. While some suggested that some supermarkets cared less about safety, others noted that smaller and older shops may have found it harder to reorganise around the new rules.

3.1.4 Feedback on organised assistance

Government and local authority assistance

Experiences of government support included help with shopping, food parcels and financial assistance. One older adult described how their local authority had set up a volunteer scheme in the area:

> *My local authority had a scheme whereby they used volunteers to shop for people who weren't able to do it themselves, pick up medicines and generally be a dogsbody. They gave us a telephone number to ring to ask for help. (Older adult participant)*

Participants had differing experiences of food parcels. One single parent who was socially isolating with an ill relative had received "*really lovely*" packages, which were

coordinated by a local councillor, with others describing friends receiving boxes with which they were pleased. In contrast, others described friends receiving food parcels with food that they did not want to eat or did not need, which resulted in them continuing to visit supermarkets and giving food away. One participant questioned the government's use of resources in this respect:

> *I do take issue with the government's food parcels because my friend's instance… Well, she got the letter from the doctor because she's vulnerable and she had to self-isolate; she qualified for food parcels. They didn't ask whether she…she didn't need charity and the government - I know it's a small amount of money compared to the rest - but the government's wasted giving things to people who didn't need it. She's passed it on to me because she doesn't eat vegetarian stuff on the grounds that she wants to eat meat! (Low-income participant)*

Among single parents, some had also received additional Universal Credit and vouchers or food boxes for children on free school meals which had "really helped". However, this support had not been available for one parent who was a home educator. Local authorities and parish councils were also described as a source of information, for example providing details of shops that would deliver or volunteer schemes. However, one older person explained that much of the information was provided online, which was problematic for those who did not have good access to the internet. While some participants had experienced government assistance, others felt that this support had been limited or did not know what assistance the government had provided. One participant commented that the availability of support differed depending on the local authority.

Community groups

In some circumstances, it was felt that the local community or community organisations provided more support than the government or local authorities. Experiences of informal community support are described above (section 3.1.1) In addition, BAME participants highlighted the role of religious organisations, including temples, gurdwaras, mosques and churches in supporting people to source food, running food banks and shopping services. One participant explained:

> *We did get a lot of support from community organisations. We had a few of the local temples write to my parents and just say, 'If there's anything you need, get in touch with us and we can go and pick it up for you'. (BAME participant)*

However, participants did not always accept support. Aligning with comments on food parcels, some participants found that food banks did not always provide the food that was wanted or needed. One participant stressed that this was particularly an issue for those who did not eat a typical British diet:

> *If I had received the resources, they would have been wasted because it's not part of our diet, tinned tomato soup and packet of mash…For your mainstream, British person that would probably, that fits in with your diet. I have a child who's expecting rice and peas with jerk chicken for dinner, so that is not going to necessarily make sense. In the end, I found myself in a place where I was saying, 'Actually, thank you for the offer, but how is it, it's not going to, I don't want to waste the food. (BAME participant)*

Another participant commented that their parents did not use support offered because others needed it more:

> *[B]ecause my parents could rely on myself and my brother. It probably wasn't the right thing to use up their time when they could better help other people, I think. (BAME participant)*

3.1.5 What would have eased any difficulties sourcing food

Participants suggested a range of measures that could have improved experiences of sourcing food during lockdown. For example, difficulties could have been eased if supermarkets had been able to share data about which periods were busiest and stock availability, provide childcare for lone parents, construct shelter outside for those queuing and more online delivery slots. However, it was acknowledged that these changes would be dependent on supermarket capabilities and resources, and several participants also thought supermarkets probably did not receive clear guidance from the government and were "*doing the best they could*" (BAME participant).

A key change to the government response was improved messaging on bulk buying, including stronger assurances that shops would remain stocked and better messaging through social media, given the extent to which messages spread through these platforms. It was felt that the government had left it to supermarkets to assure the public that the food supply chains were secure. One participant explained why more detailed messaging was necessary:

> *I think the government were generally very poor at telling people why they shouldn't panic buy. The message was, 'Don't panic buy', but there was never - at least in my memory anyway from the government - there was never any explanation. (Low-income participant)*

It was also suggested that government policy needed to urgently tackle food bank supplies, as banks were running out of stock and ways of donating had been limited, particularly for those who had moved to shopping online.

3.2 The impact of Covid-19 on sustainable diets

Appendix C presents participants' definitions of sustainable diets, taken from the pre-focus group questionnaire and from discussion during each focus group.

3.2.1 Producing and sourcing of food during lockdown

There was an increase in locally grown foods during lockdown, with participants growing their own herbs and vegetables (in the BAME group and single parents' group) and choosing to make their own staples such as bread and pasta. Shortages of flour and yeast were common across all four groups, reflecting the importance of baking to participants during lockdown, both as a source of food and a hobby.

Concerns were raised about the origins of food during lockdown. A number of respondents noticing changes to the countries of origin of the food they purchased, with members of the BAME group in particular noticing that food was sourced from different parts of the world to 'normal'. This was felt to reduce both the quality and freshness of the food and led some participants to prioritise purchasing food produced in the UK to "*[support] our country and our people*" during the lockdown. However, this

was not the case for the majority of respondents, many of whom did not notice a change in the provenance of foods in supermarkets or did not check where food was produced.

3.2.2 Shopping locally

While respondents did not necessarily notice any difference in country of origin when shopping at supermarkets, purchasing food locally became a priority for many. Reasons for this varied, and many did not explicitly link this to sustainability or environmental impact. However, sourcing and purchasing food locally was identified by respondents as a key element of a sustainable diet and switching to locally sourced or purchased foods may be seen as environmentally beneficial for consumers during lockdown. Participants identified that 'shopping locally' referred generally to shopping outside of the larger and national supermarkets. This included corner shops, village stores, smaller or independent supermarkets, farm shops and butchers.

Across the groups, participants felt that it was important to support local businesses, recognising that many small businesses were struggling financially. This also had benefits for the consumer. Those living in rural areas reported a greater availability of fresh fish and meat in local shops, when suppliers were unable to sell produce to restaurants. Additionally, where respondents were concerned about animal welfare, purchasing meat from a local farm during lockdown also allowed them to buy meat with greater confidence, as they felt able to trust in the supply chain. More broadly, local shops were seen as sufficient for most needs, although lacking in speciality food, such as vegan products.

While there were many positives expressed about shopping locally, there were also some downsides. Buying directly from local suppliers, such as directly from farmers, impacted on price. Some respondents reported that buying direct reduced costs, while others, particularly those who had previously used farm shops, saw an increase due to the additional cost of deliveries. There was a scarcity of locally grown vegetables as farm shops became more popular and local farms diverted resources to deliveries rather than planting crops. Finally, safety concerns emerged where there was a lack of social distancing, such as at open-air markets.

3.2.3 Food packaging

Changes to food packaging were noticed across the group. In supermarkets, respondents noticed that more food was pre-packaged, with previously 'unpackaged' vegetables and bakery items only available in plastic bags. This was contrasted to both 'pre-lockdown' supermarket shopping, where participants had been able to shop for loose fruit and vegetables, but also to buy from smaller, independent stores. Larger Asian grocery stores and local shops, where fruits and vegetables were openly on display, were viewed positively as respondents did not have to buy pre-packaged food. However, respondents in the BAME group who had previously shopped in Asian stores, reported switching to supermarkets in lockdown as in some areas of the country Asian stores were more likely to be closed. This meant both a lack of availability of preferred foods, greater expense, and an increase in plastic use.

The increase in shopping online also exposed more customers to excess plastic use. A number of respondents expressed disappointment that individual items, such as apples, were wrapped in plastic then placed in a single-use plastic bag, creating a 'multiple layer' of plastic wrapping. This was seen as regressive in light of respondents' preferences to reduce the amount of plastic used. Further implications of the lockdown included preventing respondents in the older adults group from travelling longer distances to visit specific low-packaging stores. These concerns about plastic waste were balanced in other groups against safety concerns. For example, respondents in

the low-income group expressed worries about the safety of unpackaged foods, preferring to buy packaged food during the lockdown so that it could be 'wiped clean'.

3.2.4 Consumption of meat and dairy

Few respondents mentioned a deliberate reduction in their meat or dairy consumption during lockdown, although several maintained a pre-existing vegetarian or vegan diet. Through changing the location of shopping, from culturally specific food shops to mainstream supermarkets, a number of BAME respondents reported changing the type of meat they purchase, such as a reduction in red meat, or changing from options such as oxtail and saltfish to chicken and pork, although this change was indicated as temporary. For those in the low-income group, meat consumption did not reduce during lockdown, although they reported being more likely to bulk buy items and freeze until needed. Others in the older adults group reported buying more meat as fish counters in the supermarket were closed, and they were wary of buying frozen fish.

Dairy consumption did not change for many participants during lockdown. While some in the older adults group reported reducing their cream intake in order to promote a healthy diet, members of other groups reported increasing their milk intake, whether due to having more time for breakfast or owing to the price increase in vegan and alternative milks.

3.2.5 Food wastage

For respondents, food wastage increased during lockdown as the result of panic buying, although many respondents spoke of this in the abstract, rather than as an issue directly affecting them. There were concerns that people had been quick to discard excess food after "*buying in fear*" at the start of the lockdown, but it was felt that this subsided after the initial rush at the start of lockdown. This also led to more conscientious behaviour from some respondents who did not want to waste more food after experiencing scarcity at the start.

Online shopping was blamed in some instances for increasing food wastage. However, when respondents were able to "turn off" the substitutions feature on their online shopping services, this was seen to decrease wastage.

3.3 The impact of lockdown on healthy eating

Appendix D presents participants' definitions of healthy eating, taken from the pre-focus group questionnaire and from discussion during the focus group.

3.3.1 Changes to meal planning and preparation

Positive changes during lockdown

Respondents across the groups reported that they cooked and prepared food more regularly in lockdown. Three core rationales were given for this behaviour. Firstly, planning meals in advance became more important as a result of shop closures; secondly, to avoid boredom, respondents found themselves cooking more; and finally, due to increased time available for those in the older adults' group, more creative cooking was attempted.

For some working from home, lockdown meant a lower calorie intake at lunchtime and eating lighter meals instead of purchasing pre-made or takeaway food. One respondent also reported changes to evening meals. While previously their company had paid for

employees' evenings meals when working late, lockdown changes meant that they no longer used this benefit and had noticed a decline in eating takeaway food. Others found that cooking (from scratch) led to a more balanced diet, as they had greater control over what they ate. For children, eating lunch at home could lead to a positive increase in calorie consumption, with one parent reporting their child looked healthier as a result of eating bigger lunches.

Lockdown changes in shopping patterns also had an impact on participants' purchasing of high calorie foods. For example, respondents in the low-income group reported previously buying food "*last minute*", eating more ready meals and "*bingeing*" food late at night. Changing their shopping patterns meant that food was no longer as readily available so snacks had to "*last*", with no further snacks available if consumed. One respondent reported "*hiding*" the snacks she bought in the supermarket to make it last until the next shop. Others reported buying more food in bulk and freezing, leading to a decrease in consumption of ready meals.

Closures of restaurants and cafes also had an impact by reducing respondents' ability to easily access takeaway food, with some respondents making home cooked versions of their favourite meals, which they perceived reduced their spending and their calorie intake. The closure of cafes and restaurants had another positive impact on diet by providing a source of fresh vegetables and fish for low prices, as many switched to selling fresh produce rather than prepared food.

Negative changes during lockdown

In contrast, for some, lockdown reduced their ability to plan meals, due to the unavailability of their usual staple foods. This reduced availability had an impact on healthy eating. For example, one respondent reported that they were unable to purchase items such as rice and pasta and so bought more processed foods, such as croissants. Another respondent reported buying a high-end coffee machine in order to have "dependable" treats and manage their anxiety about their preferred food being unavailable.

While some participants felt that their supplies of fresh fruit and vegetables had increased due to restaurant closures, others felt that vegetables became more expensive, limiting their ability to purchase fresh produce. This was blamed on increased popularity and the rising costs associated with food delivery.

3.3.2 Increased snack consumption

Respondents reported that being at home more regularly increased their consumption of food for reasons of convenience, with respondents commenting that it became easier to visit the fridge, snack on high-fat, salt and sugar products like biscuits and crisps, and enjoy a break with home-made cakes. For those working at home, this was particularly acute, as it offered respondents something to "*look forward to"* during the workday.

> *We've got our work done very quickly and then what else is there to do with the day? (Single parent participant)*

Others, such as those in the older adults' group, reported that they were now attempting to avoid cake during afternoon tea, which at the start of lockdown had become a regular treat. A number of respondents spoke about the impact of boredom on cooking during lockdown. This could be positive, leading to experimentation by respondents, who had more time to try new recipes, making their own savoury snacks, and being more inventive and creative. This was emphasised among the older adults group who did not work and so had more time available to test new recipes. However,

others felt that home cooking (and baking) had a negative impact on their diet, leading to increased consumption of home-made cakes and sweets.

3.3.3 Increased alcohol consumption

Increased alcohol consumption was reported in the low-income, single parent and older adults groups. For some, this corresponded to feelings of boredom during lockdown, particularly at the start of lockdown. Alcohol was seen by one older adult as "*what to do*" when there was "*lots of time to do [it]"*. This was also related to maintaining normal social relationships during lockdown, with respondents in the older adults group reporting that regular drinking on Zoom calls increased feelings of 'neighbourliness'. Buying alcohol in bulk, and a lack of socialising outside the home, may have also contributed to this increase. However, this was not necessarily a long-term increase, with a "*tremendous rise"* at the start of lockdown which has now decreased for many; the potential for weight gain one reason for the decline.

3.3.4 Changes to health priorities

Increased importance of a healthy diet and physical fitness

For some respondents, the coronavirus lockdown, centring around an epidemic, put the focus on health and diet. Among the BAME group, there were considerable concerns about the relationship between health, diet and Covid-19, with a healthy diet seen as a way to improve immunity and avoid the health risks. This was related to an awareness that being overweight could impact the severity of Covid-19 symptoms.

Respondents in the BAME group were also conscious that lockdown meant reduced access to exercise, leading to a greater focus on healthy eating to counterbalance this restriction; a perspective shared by those in the older adults and low-income groups. Respondents who predominantly exercised at gyms and swimming pools, both of which were closed during lockdown, noted that this had led to weight gain. Others reported that they had taken up exercise which could be done from home, such as yoga or running, to maintain or increase their fitness.

Food as self-care and comfort

However, while older people and BAME respondents, who were at highest risk from Covid-19, were often conscious of the need to maintain a healthy diet during lockdown (whether or not they were successful), these behaviours can be contrasted with a number of respondents who focused on food as self-care and comfort during lockdown. For example, respondents who had experienced parental bereavement during lockdown reported 'comfort eating' and subsequent weight gain; however, this was not seen as an important concern for them during their period of grieving.

For others, the turmoil caused by lockdown had led to a relaxing of previously held ideas about food choices, with one single parent describing how the challenges of lockdown meant that they were not going to "*punish*" themselves for their food choices. There was a sense of 'forgiveness' here, suggesting that in times of crisis, people feel more accepting of their diets, without "*counting calories*" or aiming for a particularly health-focused diet. Others spoke of the need to eat food that made them happy during lockdown, to combat some of the negative impacts of being unable to socialise or travel.

> *If I was having to eat broccoli all the time, I should become extremely depressed very quickly. (Older adults group)*

Food shortages themselves could have a negative mental health impact for respondents, leading to a reliance of other forms of treats instead. For example, one respondent reported experiencing food shortages as a child; as a result, the shortage of eggs, rice, pasta and fish in the supermarket reminded them of this trauma. This led them to use other treats, such as expensive coffee, to manage these feelings.

3.4 Support to improve diet during lockdown

3.4.1 Support to access fresh or local foods

For respondents in the BAME group, there were challenges in accessing their normal sources of food shopping during lockdown as many smaller specialty shops were closed, especially outside of larger cities. Ensuring that these smaller stores were open would have enabled them to maintain a healthy diet, as these were sources of fresh vegetables and cheap, healthy staples. Additionally, where respondents had previously used farm shops, keeping these open would have been useful for respondents to access fresh produce.

3.4.2 Information from the government, shops and media

As discussed above, respondents were concerned at the lack of information available from supermarkets and the government regarding the availability of food and security of the food supply. In addition, respondents also identified that there was a lack of information available about how to maintain a healthy diet in lockdown. For example, there was little information available from the government about accessing locally grown food from farms. Others suggested that television programmes could play a role in helping a healthy diet by informing consumers about the best way to cook seasonal foods.

> *When is our potato season? When is our leek season? When are all these things, and what can we make from them? (Single parent participant)*

3.4.3 No need for additional support

Finally, while many acknowledged that additional support may have been useful to maintain a healthy diet in lockdown, others found that either the lockdown had little impact on their diet, or any changes that were made were self-determined. This meant that respondents did not feel that additional support would have helped.

3.5 Sustaining change

In addition to discussing the impact of the Covid-19 lockdown on food consumption and shopping, participants were encouraged to consider which changes they would like to continue and which changes they would like to end. This section examines these reflections as well as the expectations participants have of the food system over the next 12 months.

3.5.1 Changes participants would like to sustain

Food shopping

For participants who had started or continued shopping online, many expressed an interest in continuing to shop this way. Participants found online shopping convenient

and easier to manage compared to shopping in store. Those who lived further from the supermarket found online shopping particularly convenient. With an increase in the use of local shops, online shopping was also discussed as a good way to continue purchasing basic items such as cleaning products, while sourcing other items more locally. This was partly related to safety. For some, supermarket shopping carried a continued risk of contracting Covid-19 and online shopping was a safer alternative. One participant who is shielding noted that they would not feel comfortable shopping in store even if a vaccine is developed, fearing that some people may not take the vaccine.

In addition to shopping online in the future, participants wanted to sustain their changed shopping patterns. Those who had changed to shopping as a family rather than in multiple individual shops saw this as a more organised approach and a way to save money. Participants expressed an interest in continuing to shop less frequently, for example, once or twice a week compared to every day pre-lockdown. This change was again seen as a more organised approach and a way to save money. Others felt that doing a 'large shop' on a less frequent basis compared to multiple smaller shops gave them more freedom, as a wider variety of food and ingredients were available. Participants also wanted to continue doing a large shop to allow for batch cooking, planning meals in advance and freezing food items.

Another change that participants wanted to continue was visiting local shops more frequently. It was noted that using local shops such as farm shops provides financial support to local producers. This was important to participants as they wanted local businesses to do well and did not want to only support major retailers. Participants felt that they would continue to use bigger supermarkets for items like toilet rolls and cleaning products and source items such as vegetables and meat from more local producers. As well as farm shops, participants expressed a wish to continue growing their own food, such as vegetables, which some had not done before. This was emphasised most by those in the single parents' group, who noted how schools have encouraged home growing as part of home-schooling projects.

Changes to ingredients and meals

Participants also expressed a wish to sustain lockdown changes to ingredients used in cooking and methods of cooking. This included reducing meat, using more seasonal ingredients, batch cooking and learning to cook new meals. Participants linked using more seasonal ingredients to a wish to support local shops and initiatives by farms to produce food for nearby populations and move away from mass producing products such as wheat.

As well as choosing certain ingredients, participants wanted to continue meal changes such as having smaller, healthier lunches containing less carbohydrates like pasta and more on salads. There was a desire to continue to experiment with food, as many had done during lockdown by trying new recipes and ingredients. One participant discussed learning to use ingredients such as lentils and wanted to continue learning to create new meals as this was helping to reduce consumption of junk food. Another skill which the low-income group were keen to develop was that of batch cooking, which respondents felt able to do more by shopping in bulk.

As well as batch cooking, a key change that participants wanted to sustain was meal planning in advance. As discussed above, this change was also tied to changes in shopping, where shopping was planned more in advance and done less frequently.

> *It's not something that we've ever done before and I think sometimes when you come back from work, you're just, what do I eat? You just open the cupboard, see what you've got, see what you've got in the fridge and just go for it. I think*

because … supermarket availability was limited … meal planning really did help with what we're going to eat and what we're going to buy as well. (BAME participant)

Eating and drinking out

A further key area for sustaining change was continuing to eat and drink out less frequently. Reasons for this included experimenting with new meals at home and the realisation that there are good alternatives to eating out. The cost saving from not eating and drinking out was also emphasised, particularly by the low-income group. However, participants did not want to stop eating and drinking out entirely in the future and suggested that occasional food or drink out can be a nice treat and a way to support local businesses.

Changes to supermarket shopping were also found to impact habits of eating and drinking out. Participants in the older adults group mentioned that before Covid-19 restrictions, supermarkets were a place to walk to and have a coffee, acting as both a form of exercise and socialisation. Participants had changed to walking in the countryside and felt that going forward they would continue this and only occasionally visit the store. This change is also linked to the wish to continue online shopping among this group.

Healthy lifestyle

A further area where participants wanted to sustain change was maintaining a healthy lifestyle. In addition to changes to healthier meals as discussed above, continuing to keep active was important. In particular, keeping active through manual work such as washing the car or gardening was mentioned. It is worth noting that many participants linked healthy eating and exercise and viewed them holistically. For example, participants noted that the restrictions on exercise during the Covid-19 lockdown increased their focus on healthy eating.

3.5.2 Changes participants would like to end

As well as changes that participants would like to sustain, participants were also asked about changes to eating and shopping during lockdown that they would like to end.

Returning to the pre-lockdown supermarket

The negative aspects of supermarket shopping were a key area that participants wanted to end, for example, difficulties with the availability of certain items and the requirement to queue outside stores. Participants described differing experiences with queueing, with some reporting waiting around ten minutes on average and others reporting a two- or three-hour wait, which participants found distressing.

The queueing part was quite distressing because I just thought, I don't really want to get to the store and queue for half an hour, an hour, to get in the store. (BAME participant)

Although some participants wanted to sustain changes made in terms of shopping less frequently and using online shopping, others did not want to. Participants felt that they would like to go back to shopping more frequently, such as shopping every day, because it gave more choice of ingredients. One participant reflected that they would like to go back to visiting the butchers and the grocers after work each day as it gave variety in meals throughout the week. For those who wanted to return to in person shopping in supermarkets, this was because shopping in store rather than online

allowed you to pick out your own food and decreased the risk of bruised fruit and vegetables. Online shopping also raised concerns about deliveries being left on the street and the difficulty of online orders swapping food items which were not liked or required, which made shopping in store a better option.

Increased alcohol consumption

In relation to diet, one change that participants wanted to end was increased alcohol consumption. It was felt that this was a coping mechanism during lockdown, a consequence of being stuck in the house and related to bulk buying as alcohol was an item often stockpiled. Participants emphasized the importance of moderation in relation to alcohol and the negative health consequences of increased consumption, such as the potential for weight gain.

Socialising with food

Many participants reported the desire to return to food as a way to engage with others. For example, some missed cooking for others and having friends and family over for dinner as well as the spontaneity of being able to go out for dinner or lunch. Eating food out of the home was also important on an individual level. For example, one participant mentioned that buying soup out at lunch was important for them as an act of self-care.

The importance of going out to eat was emphasised by single parents, who discussed wanting to go out and leave children with a babysitter again. This suggests that the inability to eat out perhaps affected those with children and particularly single parents to a greater degree and was one that these participants were keen to change looking forward. This is consistent with single parents also emphasising the wish to end spending lots of time cooking, with one participant expressing they felt they were in the kitchen the whole day to prepare various meals.

3.5.3 Learning rather than changing

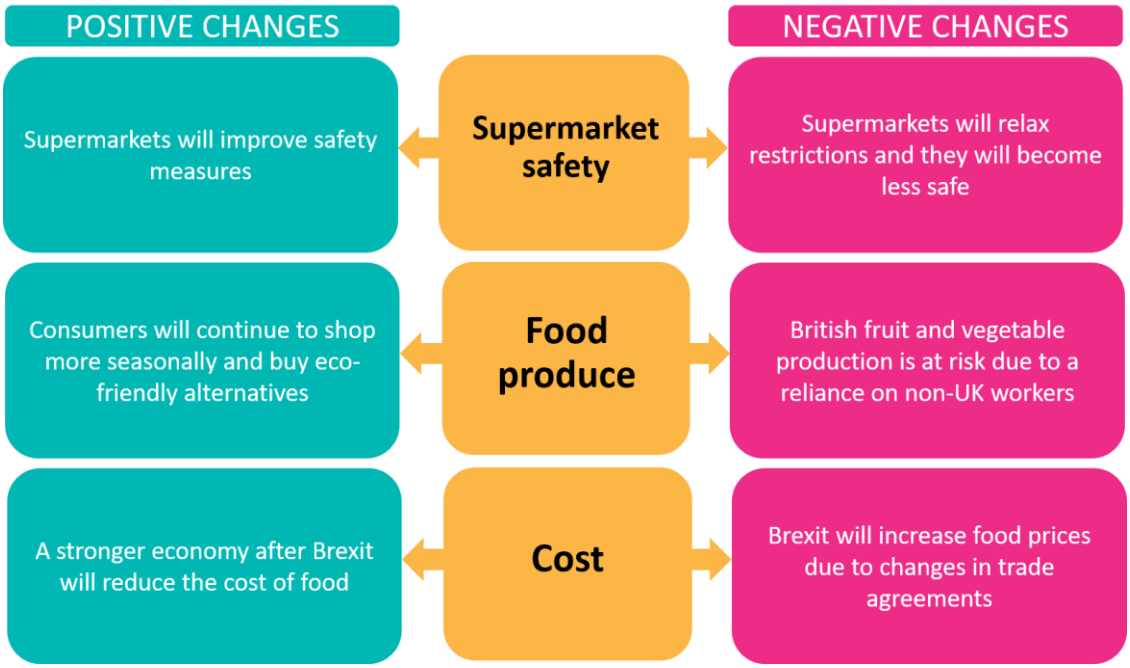
Although most participants wished for some changes to continue and others to end, some wished for everything to go back to exactly the way it was before, emphasizing the important of learning from the experience rather than maintaining the changes. Emphasis was put on the disruption of the changes and their mental health implications.

> *I don't particularly think there's any one thing that people would like to keep really…we don't need to hang on to anything from this, we just need to learn from it. (Single parent participant)*

3.6 Expectations of the food system over the next 12 months

Participants explored their expectations of the food system over the next 12 months. Most discussion focused on changes to supermarket shopping, food supply and cost, and environmentalism. The implications of Brexit also featured heavily as part of the discussion, and participants saw both Brexit and Covid-19 as significant influences on the food system over the next year.

Figure 3:1 Positive and negative expectations of the food system



3.6.1 Changes to supermarket shopping

Over the next 12 months, participants predicted a number of changes to supermarket shopping, both in terms of supermarket restrictions as well as their own shopping habits. There was a variety of opinion about health and safety measures in supermarkets. Some participants felt that supermarkets will continue the restrictions and that they might improve safety for customers; perceived as a positive change. Others felt that supermarkets will become more relaxed with health and safety. Participants who expressed this view often felt that supermarket safety requirements had not been adequate from the start and they did not think improvement was likely to happen in the coming months.

Despite concerns over safety, it was expected that more people will start to use the supermarkets again in the next year. This was expressed particularly in the older adults group, who were more likely to be shielding and avoiding supermarkets. However, it was thought that many others would still not want to take risks and will continue shopping online. As well as some returning to supermarkets, it was also thought that others would fall back into old habits and stop using local suppliers which they might have started to use during lockdown.

3.6.2 National food supply

In relation to food supply, participants felt that this was an area of uncertainty due to both Brexit and Covid-19. It was also felt that Brexit may affect food supply due to the disruption of fruit and vegetable shipping routes. In addition, Brexit could result in changes to the quality of food arriving in the UK.

We really don't know what to expect. (BAME participant)

As well as imported food, it was felt that Brexit poses a risk to fruit and vegetable production in the UK, because of reliance on workers from Eastern Europe to pick the produce. These workers may not be able to travel to work in the UK if there are changes to immigration policy. It was also felt that the economic impact of Covid-19 would affect national food supply in relation to food retailers going out of business. However, concerns about food retailers closing were confined mainly to job losses rather than the direct impact of Covid-19 on food supply. Participants felt that food supply chains were sufficiently resilient to adapt to such changes.

3.6.3 Personal food supply

Concern was expressed by participants about the possibility that others would stockpile food again, due to uncertainty around Brexit and the possibility of a resurgence in Covid-19 cases. Participants did not speak about stockpiling for themselves and focus was instead on the negative implications of others stockpiling, such as a reduced food availability.

> *I have got nightmares of again queueing for food and my pasta not being there in the supermarket. Genuinely I think that they've done a great deal of preparation, and I hope that they are now ready for the second wave. I think it's going to happen, but I anticipate people will start stockpiling on the staples from September onwards. (Single parent participant)*

3.6.4 Cost of food

Participants often held differing ideas about changes to the cost of food. For some, it was felt that food would be cheaper due to a predicted stronger economy after Brexit. Others felt that Brexit would increase the price of food due to changes in trade agreements with Europe and the impact on trade routes and import and export tariffs. In addition, others felt that a weaker economy after Brexit and Covid-19 would make food items more expensive.

3.6.5 Environmental efforts

A further key theme to emerge in relation to expectations of the food system was the environment, both in relation to eco-friendly living as well as the long-term sustainability of the global food system. As discussed in a previous section (3.2), many participants had made efforts during the pandemic to improve the sustainability of their diet, such as buying local produce, eating seasonally and growing vegetables. Looking forward over the next year, it was felt that there would be a continued move to a less "*eco-aggressive*" way of eating, particularly in supermarkets. One participant noted that a large supermarket chain is going to start selling branded products in refillable containers. The participant felt that although this was only a small start it was a move in the right direction.

A further concern raised in the older adult's group was the long-term sustainability of the global food system. Participants felt there were problems with food packaging and waste within the system and going forward there was a need to import less food and become more self-sufficient as a country. It was felt that "revolutionary change" was needed to save the planet but it was recognized that change needs to come from governments and that the impact of individuals can have through their consumption decisions is limited.

> *I think there are some very, very big issues here and I think as individuals one can worry about it at one level, but there's very little that we can do about it as individuals. (Older adult participant)*

Participants also recognised that it is easier to shop more ethically and locally for those who can afford higher prices, making widespread change more difficult to achieve. It was recognised that this may also become more difficult in the future with job and income losses due to Brexit and Covid-19.

4 Discussion and conclusion

Our research into the experiences of those from disadvantaged groups in accessing food during the recent coronavirus lockdown indicates that respondents faced a variety of challenges, including:

- Being unable to visit preferred stores;
- Being unable to access familiar types of food; and
- A lack of appropriate or tailored support.

These challenges resulted in a number of changes, including the types of foods people ate, how they ate them, and whether their diet was sustainable or healthy. However, the majority of respondents felt that they had been able to adapt to these challenges successfully and, indeed, sought to keep many of these behaviour changes moving forward. This section will present a discussion of these findings and present brief recommendations for any future lockdowns.

Challenges in obtaining food

One of the clearest impacts of the lockdown was in the challenge of shopping 'as usual'. Many respondents reported switching from supermarket shopping. Those who had previously shopped in person frequently began to shop online, particularly those who were shielding, with those who had previously shopped online finding it more difficult to get shopping slots. The ability to shop online varied by area, with respondents in more rural locations unable to easily obtain slots, and the lack of online slots available to existing customers was seen as a lack of loyalty for regular supermarket customers. For some, shopping became a chore, whether due to spending a long time online ordering food for delivery, queueing up outside the supermarket, or following new safety policies such as one-way systems and wearing face coverings. Online shopping was also seen as taking the 'enjoyment' out of regular shopping, with respondents unable to pick up items that caught their eye, or enjoy social interactions, such as visiting the shops with friends or talking to staff. The change to online shopping may have supported individuals through lockdown, but at the cost of social interaction.

For respondents who were not shielding, one area of growth in lockdown was people's willingness to shop in different locations and at different times. Respondents found that local shops, such as corner shops, village stores and farm shops, were often better supplied, albeit more expensive, than larger supermarkets, and often with shorter queues. The exception was for respondents in the BAME group, who found that, outside of major cities, many Asian shops were closed. While for many respondents, local shops were better stocked, this was not the case for those searching for non-mainstream foods, with examples given of oxtail, salt fish, large bags of rice, and other staples. Yet, while smaller stores were better supplied in some regards, some items were reported as unavailable across all groups, including yeast, flour and pasta. While some individuals reported bulk buying in lockdown, this was not common among the group. Respondents sought to distance themselves from this behaviour, which they viewed negatively. Those who did bulk buy reported that this was to maintain restricted diets, such as those resulting from allergies, or that it was part of their usual food practices. There were also cases where food stockpiled for a 'no deal Brexit' was used during the lockdown period instead.

In addition to changes to shopping, it seems that many respondents began to develop closer relationships within their local communities during lockdown, brought together through the difficulties in obtaining food. Participants across all groups reported offering and receiving support during lockdown, ranging from driving neighbours to supermarkets, dropping off produce to local family members, or sharing food produced at home such as vegetables and eggs. This may have offset some of the concerns about losing the social benefits of supermarket shopping. Yet it is important to note that, for those who may have required additional help, such as those who were older and/or shielding, there were concerns about being a 'burden' on others. Those who enjoyed this increased community engagement, therefore, may have been more likely to deliver support, rather than receive it.

Policies to improve food supplies

While many individuals responded to lockdown measures by limiting their time in supermarkets or seeking to move to online delivery, there was a high level of awareness of 'feeding the nation' policies. For example, participants reported being unable to purchase more than a certain number of one product, with examples given of tinned beans, eggs, and toilet roll. For one participant with four children, a limit of three items meant that not all children would eat the same food; others found that they could avoid these limitations by re-entering the shop, suggesting that these were not always closely monitored by staff.

Safety-related changes in store, such as one-way markers, social distancing markers, the use of hand sanitiser, recommendations on wearing masks, and restrictions on the number of people allowed in, were all mentioned. These guides were not always followed by respondents and could make the experience of shopping more difficult. It is interesting to note that, despite these safety policies, many of those who were older did not enter a supermarket at all during lockdown, suggesting that this was not sufficient reassurance. Fears of contracting Covid-19 were not assuaged by these measures; instead non-compliance with these measures, as seen from their fellow shoppers, was seen as high-risk in spreading coronavirus. Face-to-face shopping became a source of tension and/or fear for many, which was not wholly offset by supermarket policy.

Government and local authority assistance

There was mixed use of government and local authority assistance schemes. Help with shopping and food parcels were welcomed by respondents when appropriate, such as one respondent who received a food parcel from a local councillor. However, for those who had not requested the help, food parcels from the government appeared redundant, such as one participant whose 'shielding' friend did not use the food parcel she received as it did not contain the food she preferred. For single parents, additional Universal Credit and food vouchers for children on free school meals were welcomed, but this was not extended to parents who previously home-schooled their children, leading to a sense of unfairness in the treatment of the two groups.

As discussed above, sharing food shopping through the community was seen as a positive way to support neighbours and friends. More formalised community groups also provided support, especially religious organisations, by running food banks and shopping services. However, just as with the government support, there was some concerns that this was not always appropriate. For example, one member of the BAME group reported that the food they were offered from a food bank would not have matched her preferred diet. This reflects the importance of a multicultural approach to providing support to individuals during the lockdown.

Maintaining a sustainable lifestyle

For many, the lockdown necessitated a switch to local shops and an increase in locally produced food, which reduces the distance travelled to purchase the food and the air miles associated with food grown overseas. While this promotes a more sustainable diet, one of the greatest impacts that the Covid-19 lockdown had on the environment was in changing food packaging, with reported increases in the amount of plastic used when purchasing food. This was based on both changes in store, such as supermarkets using a greater amount of plastic wrapping, and which stores were used, as, for example, Asian grocery stores were closed, where respondents had previously purchased unpackaged fruit and vegetables. Responses to this varied: while some acknowledged the 'regression' in returning to more plastic in the supermarkets, in comparison to the previous promotion of eco-friendly, non-plastic packaging, others felt that the need to clean produce due to Covid-19 contamination concerns outweighed their dislike of plastic. It is clear that for many, health trumps sustainability at this moment in time.

The consumption of meat and dairy did not significantly change across the groups, but the type of meat consumed differed for some. This was related to product availability in the main part – for example with the closure of fish counters, one participant switched from fresh fish to meat – but for some BAME participants, this was seen to have health benefits, at a time when a healthy diet was emerging as a more significant concern.

A healthier diet

There were two main strands to the discussions relating to food during the Covid-19 lockdown. Firstly, respondents had more time at home. This could be positive, such as enabling time for meal preparation, cooking food in bulk and freezing for future meals, eating more with family members, and reducing the amount of takeaway and junk food consumed. This was viewed positively, allowing respondents to make healthier choices. However, the additional time at home had some more negative impacts on individual diets, as respondents took the opportunity to bake more sweets and cakes and reported more snacking overall for those who were working from home. In addition, increased alcohol consumption was seen positively to begin with, as a method of socialising on online calls, and in tackling boredom, but respondents acknowledged the limitations of this and many were reducing their intake by the time of the focus groups.

Secondly, although respondents were keen to ensure that they maintained a healthy diet in lockdown, for some, the pressure of the lockdown period meant that food was a source of comfort and relaxation, with many deliberately choosing or recognising that they made unhealthier choices. Maintaining a healthy diet was deprioritised in favour of adapting to their circumstances.

It should be recognised that, for those who were at particular risk from Covid-19, including those who were in the BAME focus group, there was an awareness that being overweight could be related to the risk of severe outcomes from coronavirus. However, further research is required to assess the level of impact that this had on choices during lockdown.

Moving forward

Despite the difficulties of the lockdown period, many respondents had developed successful strategies for accessing food, and many of these were likely to be maintained in the future. This included online food shopping for some, although others were keen to either return to the supermarket, or to try a 'blended' approach, in which a mix of online shopping and in person shopping was used. This would allow respondents to select their own food, such as fruit and vegetables, which might be

damaged in transit, and encourage support for local businesses such as butchers. Changes in shopping pattern, such as doing a larger shop once or twice a week, were also likely to be maintained.

At home, respondents were interested in continuing some of the healthy changes made to their diet, such as having smaller lunches with healthier ingredients; experimenting with new recipes; and batch cooking. Yet there was also an acknowledgement that, while people could save money by eating more meals at home, there was a nostalgia for eating with friends, whether preparing food or eating out. Respondents sought to find a balance between these two ideals.

Finally, when looking ahead to the next 12 months, respondents did not have a clear consensus on how the food system would continue to develop post-lockdown. For some, supermarkets would continue to improve safety, while for others, supermarkets would relax their restrictions. With regard to Brexit, there were concerns both that food prices would increase and that fruit and vegetable production would decrease due to changes in immigration laws. However, this was offset by those who suggested a stronger economy would emerge after Brexit, reducing the cost of food, while others felt that consumers would continue to buy more seasonal, eco-friendly products. The outcome of the lockdown remains to be seen.

Recommendations for future lockdowns

From our analysis, a number of key areas for improvement have been identified, in order to support the general public through any future lockdowns.

Firstly, supermarkets should aim to be more open about their stock availability and information about the busiest visit times. This would help people to attend stores at quieter times, leading to shorter queues. Supermarkets should also consider providing childcare for lone parents, to minimise the number of people in store, and provide shelter for those queuing outside. With regard to online delivery, in addition to providing more delivery slots, supermarkets should consider how individuals are defined as vulnerable or shielding in their systems, to ensure that customers who need additional support are not missed.

Secondly, it would be useful for the government to provide stronger assurances that shops would remain stocked during lockdown, along with better communication of these messages through social media. While this was helpful for respondents who were confident online, others, particularly those in the older adults' group, found that information about support services was often provided on websites. Ensuring both that social media is used for reassurance, and that information is available for those who are not familiar with digital tools, is a vital step in communicating with the public during any future lockdowns.

Finally, it is important to acknowledge the diversity of groups needing support in the UK. For members of the BAME group who were eligible for food bank support, the types of food available did not suit their usual diet and switching to the supplies available would have had a negative impact on their health. For wealthier respondents in the older adults group, food parcels were not required, despite being offered and in some cases, received. It is clear that more tailored support may be beneficial in future, while recognising that the scale of the crisis affected the ability of institutions to provide this type of tailored support.

Appendix A. Focus group topic guide

Timings	Topic guide
10 mins	**Check attendance, ensuring everyone connected, address tech problems**
10 mins	**Introduction**
	Thanks very much for ringing into this workshop today, and welcome to you all. As you know, we're really interested to hear about your experiences of buying food during the lockdown. Just to reassure you, there's no right or wrong answers. Can I just ask that you try not to talk over each other so we can hear all of your views. We want to ensure that you're all included in the discussion: • No one is expected to be an expert • Everyone's voice counts • Respect and listen to each other's opinions • No consensus is needed; not everyone needs to agree or disagree To remind you, the session will be audio but not video recorded so that we can write up the research but your contributions will remain anonymous. The workshop will finish no later than (+2 hours from start time**).** **I'm going to start audio recording now.** **Obtain verbal consent from those who we haven't yet received a signature** [Go around the group, welcoming everyone, either using the name on their screen, or asking what they'd like to be called if no name is displayed]
10 mins	**Behavioural changes since lockdown**

	We've been through a very strange time since March as we've been in lockdown to reduce the spread of the Coronavirus. With this is mind, I was wondering:
	
	• Have you changed the way you shop for food (habits, routines)?
	• What about the meals you eat?
	  • Did you bulk buy foods?
	  • If so, what types of foods did you bulk buy?
	  ○ Did you eat any foods faster than expected?

10 mins	**Impact of retailers' Covid-19 'feeding the nation' policies**
	Casting your mind back to the earlier stages of lockdown, were you aware of policies to help improve food supplies, for example: • Restrictions on total number of items allowed per shop (i.e. Tesco, 80 per order)? • A maximum of three of any one product (restricted to two in some categories)? • Reduction of range or brands of foods available? What about changes to the way you shop in store? • One-way systems? • Markers on floor to enforce social distancing? • Use of screens/plastic dividers at tills? • Restrictions of one person per household allowed in supermarket? *Do you think these measures helped with social distancing? Provided reassurance? Were effective?*
10 mins	**How individuals attempted to ameliorate/adapt to these challenges**

	Did you find ways of adapting to any challenges you've faced when food shopping? • Limiting the products that you bought? • Did you swap, borrow or trade with other people? • Did you use fast food delivery services (JustEat, Deliveroo)? More or less than usual? Did you do any grocery shopping online? • First time? Part of established routine? *Were you able to get everything you needed?*
5 mins	**Feedback on any government/local authority assistance**
	Have you had any help from the government or local authority, for example: • Food parcels? • Priority delivery slots? • Specific shopping hours for older people/ Healthcare workers? *(If experienced) Was that helpful for you? Did it give you some extra support?*
10 mins	**Identify what would have eased any difficulties getting food**
	Is there anything that could have been done which would have made buying food easier for you? • By the supermarkets? • The Government's response? • Support from third sector or other organisations?
Workshop pre-exercise: Terms	*'Before we continue with the discussion, I just want to summarise your answers to the questions we asked you before the group on what the terms 'Sustainable diet' and 'healthy eating' mean to you*
10 mins	**Explore any factors relating to Covid-19 that may affect the environmental impact of people's diets**
	Did you see any changes in food packaging? • Have you noticed any changes in the countries from where your food was produced? • During lockdown, have you bought food that was more locally sourced? If so, was that your choice? Have you noticed any changes in the amount of meat or dairy you eat?
10 mins	**Changes participants would like to sustain, and those they are keen to end**
	Are there any changes you've made during this period that you would like to continue? • Trying new brands? Products? Online shopping? • Any changes you've made that you would been keen to end? Types of meals? Food eaten?
15 mins	**How the lockdown may have facilitated a healthy or unhealthy diet**
	Did being in lockdown lead you to eat more unhealthy foods? …Or did lockdown help you to eat a healthier diet? • Did you have **more or less motivation** than usual? In what ways? • Were you **more or less aware** of what you were eating? • Were there **more or less opportunities** to buy snack foods? Fast foods? • Is there anything that would have helped you during lockdown to improve your diet?
10 mins	**Expectations of the food system over the next 12 months**
	What do you think will happen over the next 12 months around: • Any changes to supermarkets? Other food shopping? • Types of food available – lack of fresh produce?

	• Retailers going out of business? • Your longer-term shopping habits? Will you have to watch your money more? Feel more relaxed about budgeting?
5 mins	**Wrapping up**
	Thanks so much for your time today. We really hope you found it interesting to take part and share your views. [you will receive a voucher code which you can redeem at a range of shops online] We'll be sending a information sheet to you all with a list of useful organisations, just in case you want to seek any advice or support related to the issues raised in our discussion. If you have any further questions, comments, or anything else that you forget to say in the group, please don't hesitate to get in touch. The Invitation sheet we originally sent you has our contact details, so hang onto it just in case you want to refer to it in future.
	[Stop recording]

Appendix B. Analytical framework

	Changes participants made to the way they shop for food	Changes to meals/what participants are buying	Experience of policies to improve food supplies and opinions about these measures	Experience of changes within shops and opinions about these measures	Use of fast food/online delivery services	Other ways of adapting to challenges with food shopping	Feedback on formal assistance	What would have eased any difficulties sourcing food	Participant understandings of 'sustainable diet' and 'health eating'	Production/sourcing of food
Focus Group 1 …										

	Other factors related to Covid-19 that affect environmental impact of diets	How lockdown may have facilitated a more healthy diet	How lockdown may have facilitated a more unhealthy diet	Anything that would have helped to improve diet during lockdown	Changes participants would like to sustain, and those they are keen to end	Expectations of the food system over the next 12 months	Expectations around personal longer-term shopping habits	Additional comments and observations
Focus Group 1 …								

Appendix C. Defining a ‘sustainable diet’

Participants were asked to provide definitions of ‘healthy eating’ and ‘sustainable diet’ in advance of the workshop. These were then discussed within each group, to gain a greater understanding of how individuals felt about these issues.

A sustainable diet

When thinking about a sustainable diet, participants often identified that a sustainable diet could either be one which had a low environmental impact, or which was long-lasting and available. Environmentally, respondents identified two elements to this: firstly, the environmental impact of individual choices when purchasing or eating food, and secondly, the environmental impact of the food production system more broadly.

The environmental impact of individual choices

This aspect of a sustainable diet had several key components, and mostly focused on the environmental impact of food purchasing or sourcing. Firstly, a sustainable diet was seen as one in which people chose locally produced and sourced foods, which were fresh and seasonable. These could be bought or grown at home. Secondly, people suggested a sustainable diet was one in which people considered the environment during food shopping and chose foods that have a lower environmental impact. This could include adopting a vegetarian or vegan diet as a sustainable diet, or one with less red meat, views which were predominantly shared in the BAME group and the low-income group. Other steps towards a sustainable diet – for the individual – included avoiding palm oil and checking the country of origin of fresh fruit and vegetables in the supermarket, although there was disagreement among the low-income group as to whether this was practical on a day-to-day basis.

Food waste was also mentioned in the BAME group as a sign of an unsustainable diet. In this discussion, reducing food waste increased the environmental sustainability of a diet. Methods included using leftovers for animal feed or sending food waste to the local council for composting.

Environmental sustainability in the wider food system

While participants identified steps that individuals could take to improve the environmental impact of their individual choices when shopping and sourcing food, they also identified several issues in the food system which impacted on whether a diet could be considered ‘sustainable’. For example, switching to ‘environmentally friendly’ food production, defined by those in the single parent and low-income groups as low impact on the environment, and by those in the older adults group as sensitive to the needs of caring for the environment, was seen as part of a sustainable diet, although not something that the individual can control. Farming methods were seen as a factor in this, with animal welfare raised as a concern.

Minimising factory methods and fewer chemicals in food production, including in farming, were also highlighted as promoting sustainability in the food system, with the low-income and older adults’ groups in particular supporting good ecological practices in manufacturing.

Sustainability defined as the availability of food

In contrast to the environmental discussions, a number of respondents identified that a sustainable diet was one in which food consumption could be maintained for the individual. This was seen as a varied and regular diet, which could be kept going indefinitely, and which benefited both body and mind.[3] There was also discussion about the continued availability of these foods in the food system. In the older adults group, for example, respondents felt that foods that are readily available, likely to be abundant in the future, and healthy, also constituted a sustainable diet.

Finally, while there was lengthy discussion in each of the groups about these definitions, there were respondents who were unclear as to what these terms meant.

[3] Respondents did not identify the foods that made up a sustainable diet at this stage, but they did identify the key structures of a healthy diet at another point in the focus group; it is likely these are related.

Appendix D. Defining a healthy diet

What we eat

While we expected that definitions of healthy eating would vary by group, there were many areas of consensus across all participants. Firstly, fresh, natural, organic or home-grown ingredients were seen as essential, although emphasis on type varied by group, with the older adults group referencing organics. A varied diet was the second area of consensus, with the concept of 'balance' and 'moderation'. Fresh meat and fresh fish were highlighted by single parents and those in the older adults' group, while vegetables and fruit were commonly mentioned as 'healthy' foods. Pasta, rice and protein was also important, along with plenty of water. Finally, a healthy diet was assumed to be calorie deficient by those in the low-income group.

In contrast to the foods defined as 'healthy', respondents also identified foods which were to be avoided in order to maintain a healthy diet. Foods which were high in salt, sugar, fat or carbohydrate were generally seen as unhealthier, although predominantly by those in the older adults group, who also felt that cream should be avoided. Some fats and oils were required, but sugar and saturated fats should be kept to a minimum. The idea of moderation emerged as an area of consensus – fatty foods and sugary foods might be consumed as part of a varied and balanced diet. For those in the low-income group, a reduction in meat consumption was not only beneficial for the environment, but as part of a healthy diet too, although this was not explicitly identified in the other groups.

In the single parent group, a healthy children's diet was described as one in which unhealthy treats were offset by healthier options, for example, allowing children to have dessert if they had eaten their vegetables. Parents in this group felt that children should not worry about what they eat, giving the example of a children who was told at school that they should not eat chocolate. Aside from nutrition, parents felt it might be important to limit consumption of high-sugar drinks to earlier in the day for children, to promote good sleep hygiene.

Food preparation

In addition to the types of ingredients chosen, how food was prepared, and in particular, the location, was seen as a core aspect of a healthy diet. Cooking from scratch was identified as a method for healthy eating. Respondents felt that home cooking was healthier as the ingredients are clear. In the older adults group, generational differences were discussed, with the 'older' generation seen as more likely to cook, more familiar with buying basic ingredients and cooking own meals, in comparison to younger people, who they identified as being reliant on ready meals. The decline of domestic science in the school curriculum was seen as one cause of this.

However, while this view was shared across the older adults group, other participants, particularly those in the low-income and single parent groups, expressed similar views about the health impact of eating ready meals, and felt that ready meals and takeaways constituted a less healthy diet, suggesting that the views of the older adults group of the 'younger generation' did not always match the reality. Participants also had overlapping views on what constituted 'junk food', including deep-fried food, sweets and takeaways, and felt that these should be minimal in a healthy diet.

Habits and routines

Finally, among those in the older adults groups, *how* one ate food was mentioned as part of a healthy diet. This included eating regular meals with awareness of what one is eating. This may be seen as complementary to the idea of a ‘balanced’ diet, in which one’s meals are varied and filling.