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Research report

'In the wake of a pandemic': dietary patterns and impact on child health after COVID-19

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

'IN THE WAKE OF A PANDEMIC': DIETARY PATTERNS AND IMPACT ON CHILD HEALTH AFTER COVID-19

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THE ALL-PARTY PARLIAMENTARY GROUP AND THE WORKING GROUP

The Working Group that produced this Report is a sub-group of the All-Party Parliamentary Group on A Fit and Healthy Childhood.

The purpose of the APPG is to promote evidence-based discussion and produce reports on all aspects of child health and wellbeing including obesity; to inform policy decisions and public debate relating to childhood; and to enable communications between interested parties and relevant parliamentarians. Group details are recorded in the parliamentary website at:

<https://publications.parliament.uk/pa/cm/cmallparty/200408/fit-and-healthy-childhood.htm>

The Working Group is chaired by Helen Clark, a member of the APPG secretariat. Working Group members are volunteers from the APPG membership with an interest in this subject area. Those that have contributed to the work of the Working Group are listed on the previous page.

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INTRODUCTION

Our companion Report: 'Emerging Dietary Patterns: Impact on Child Health' discussed ways in which traditional dietary patterns in both the UK and internationally were changing.

In concluding we argued that:

'The interconnected nature of food, climate and health is the biggest challenge we face, but therein also lies its strength and boundless potential should we act with the necessary urgency, creativity and commitment. It is at the local level – supported by national policy – that the largest returns from such pro-activity will accrue.'

We continued:

'The food that we eat here and now can change the world.'

adding:

'If we are serious about protecting and restoring natural environments, safeguarding the health and wellbeing of our children today and restoring and protecting that of future generations, then there is only one solution.

We must change it.'

Then came Covid-19 and change was imposed – with the arrival and experience of a pandemic.

The full outcome of Covid-19; its effects and repercussions not just for the present generations but for the many that will succeed it cannot be estimated now.

In the 102 years since Spanish 'flu devastated an older world order, we are still learning its lessons today. But what has become immediately apparent is that what we eat and how we eat has undergone a revolution in four short months.

'Coronavirus pandemic will change the food industry and eating habits forever, says CEO of Food and Drink Federation, Ian Wright.'
(steve.creswell@iliffepublishing.co.uk 7 April 2020)

'To prevent the next pandemic we must take on factory farming.' (Jonathan Safran Foer and Aaron Gross, The Guardian, 21 April 2020.)

'Covid-19 will definitely be an accelerator on the conscious consumer patterns that we see unfolding. As the consumer gets more conscious, we also see more interest in sustainable, locally produced food systems solutions.' (David Brandes, Food Navigator, 17 April 2020.)

'The virus is a warning that Britain's food system must change,' ('The Guardian,' 18th April 2020).

It would also be unjust to address the Covid-19 pandemic in isolation without highlighting its interactions with another global force to become manifest in the same era in response to an incident in the US; namely, the police killing of George Floyd and the Black Lives Matter Movement.

Pandemics, poor health, systemic inequalities and a lack of environmental protections harm black, ethnic minority and disadvantaged communities in all countries more than any other groups, and the two events have shed a harsh light on those realities and their frightening interconnections – such as the higher death rate in BAME communities including healthcare workers on the frontline (Public Health England, June 2020, 'Beyond the data: Understanding the impact of COVID-19 on BAME groups'):

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/892376/COVID_stakeholder_engagement_synthesis_beyond_the_data.pdf

Therefore, to address fall-out from the pandemic without considering these marginalised groups would be inappropriate; to address the environmental crisis without considering its impact on such groups would be pointless and the separation of civil rights from health and environmental policy is delusional. The silos in which policy-making still exists in these fields are stubborn obstacles to change.

Both within and without the UK's boundaries, the diverse spectrum of peoples requires a similar diversity and inclusion in the systems that sustain life – and the production of the food that is eaten in order to live.

Sometimes change is immediate and imposed rather than incremental and the pandemic has seen an abrupt conclusion to familiar and traditional ways of living.

As we offer our thoughts about the many ways in which Covid-19 has changed our dietary patterns, we must remember that the 'brave new world' of our future ambition 'has such people in it', ('The Tempest', William Shakespeare).

Those who would construct better dietary patterns in the wake of this pandemic must ensure that people rather than systems prevail....

SUMMARY OF RECOMMENDATIONS

1. THE PANDEMIC AND CONSUMPTION; HOW COVID-19 HAS AFFECTED THE FOOD INDUSTRY (UK AND INTERNATIONALLY):

- 1.1 After Covid-19 food system responses must be sensitive to the most vulnerable
- 1.2 As the Sustainable Development Goals are interlinked, investing in food and nutrition security (SDG2) will drive progress on the 2030 Agenda more broadly
- 1.3 Remember in policy formulation that addressing hunger, hidden hunger and child malnutrition is central to a Covid-19 response
- 1.4 Improve data and surveillance systems to monitor Food Safety News (FSN) worldwide to ensure a more dynamic response
- 1.5 Maintain and increase the coverage of essential nutrition programmes
- 1.6 A Food and Sustainability Act and a Minister for Food Security to drive action and accountability on British food security and food justice.

2. LIVING THROUGH A PANDEMIC: EXAMPLES, EXPERIENCE AND CASE STUDIES DURING THE TIME OF COVID-19 IN THE UK:

- 2.1 Co-ordinate for future resilience via a Cross Government Committee to coordinate food policy actions and responses to the pandemic. Health issues should be factored into the Agriculture Bill
- 2.2 Establish a 'Right to Food Framework' including a legally binding universal right to food alongside a broader incorporation of socio-economic rights. Abolish a 'no recourse to public funds' condition in order to safeguard migrant communities from destitution:
https://www.sustainweb.org/publications/covid_19_right_to_food_nrpf
- 2.3 Explore all possible routes for financial support to households with children: Child Benefit, Universal Credit, welfare assistance grants – and remove barriers to accessing this support (like the five week wait on Universal Credit, benefit cap and child limit)
- 2.4 Stop marketing aimed at children in packaging on TV, near schools, online and on social media and create an Independent Children's Food Watchdog
- 2.5 Improve and extend school meals reach and guarantee that support is available during all school holidays
- 2.6 Address short, medium and long-term food insecurity via a National Plan; overseen and coordinated by a Minister for Food Security.

3. BRAVE NEW WORLD: THE WAY FORWARD AFTER COVID-19:

- 3.1 Embed the Sustainable Development Goals through the lens of nutrition into cross-functional policy and practice, namely the food industry, the education sector and into primary health care; aligning them to achieve sustainable diets within a 2030 framework and tackle silos
- 3.2 The UK to commit to the aim of ending funding for, and the prevention of, further factory farming by 2040 at home and abroad, to reduce the likelihood of future pandemics and to remove cheap, low welfare, poor quality and environmentally destructive animal products from the supply chain and the plates of the most vulnerable
- 3.3 The UK to commit to a funding plan for the redistribution of funding streams to regenerative local farming including growing skills, improving access to nature for all and to improve the scale and quality of meat and dairy alternatives
- 3.4 Statutory overarching targets to provide longevity and clear direction for policy change such as halving household food insecurity by 2030 (to align with the Sustainable Development Goals) and halving childhood obesity by 2030
- 3.5 'A New Deal for Horticulture'; including a grant mechanism to drive up the number of market gardeners and fruit growers to meet local demand. Shorter supply chains should be encouraged to improve grower livelihoods and increase access to fresh and affordable fruit and vegetables. Fruit and vegetable producers should be eligible for special payments to support 'on farm' employment
- 3.6 A 'Citizen Agency' taking the opportunity to reconnect UK citizens with food whilst restoring traditions, cultures and a sense of place from birth onwards. Reconnecting citizens and reframing the language from 'consumers who demand, choose or buy food' to 'citizens who can participate in, create and shape food systems' is a desirable goal': <https://www.foodethicscouncil.org/programme/food-citizenship/>
- 3.7 Collaboration between the food industry, dietetics, medical practitioners, dentists and the wider health and social care systems to ensure that consistent messages are delivered in an effective manner to achieve maximum health benefits for the population. Ensuring that healthy food choices are made and supporting the food industry to produce good quality fresh food produce will in turn have a positive impact on general health and oral health and long-term, reduce the burden of care needed which will more than likely be managing the fall-out from Covid-19 for quite some time to come.

- 3.8 Co-ordinate for future resilience via a Cross Government Committee to coordinate food policy actions and responses to the pandemic. Health issues should be factored into the Agriculture Bill
- 3.9 Establish a 'Right to Food Framework' including a legally binding universal right to food alongside a broader incorporation of socio-economic rights. Abolish a 'no recourse to public funds' condition in order to safeguard migrant communities from destitution:
https://www.sustainweb.org/publications/covid_19_right_to_food_nrpf
- 3.10 Address short, medium and long-term food insecurity via a National Plan; overseen and coordinated by a Minister for Food Security.

1. THE PANDEMIC AND CONSUMPTION; HOW COVID-19 HAS AFFECTED THE FOOD INDUSTRY (UK AND INTERNATIONALLY)

'A risk is that if policies are aimed at limiting death, for example by keeping schools open, but do not take account of other serious economic and health consequences of prolonging the pandemic rather than ending it (this) would not serve Britain well in the long term' (Professor Ben Neuman):

<https://www.dailymail.co.uk/news/article-8503039/Being-man-black-age-65-diabetic-poor-raises-risk-dying-coronavirus.html>

'COVID-19 is the last straw for millions of people already struggling with the impacts of conflict, climate change, inequality and a broken food system that has impoverished millions of food producers and workers. Meanwhile, those at the top are continuing to make a profit: eight of the biggest food and drink companies paid out over \$18 billion to shareholders since January as the pandemic was spreading across the globe – ten times more than the UN says is needed to stop people going hungry':

<https://www.oxfam.org/en/press-releases/12000-people-day-could-die-covid-19-linked-hunger-end-year-potentially-more-disease>

It did not take a pandemic to demonstrate the vulnerability of food systems to climate change and disease-related disruption; what Covid-19 has done however, is to accentuate the herculean challenge of food availability in an emergency.

Well-worn demands for a food system paradigm shift have become desperately current - almost overnight.

The virus did not create the inequities which it so brutally exposed and exploited (spreading like wildfire due to a diseased and unequal food system) but its effect has been to wreak worldwide devastation, loss, pain and uncertainty. Divergent responses to this pandemic and its outcomes have exposed shameful injustices and blind spots in our national and international efforts as we have been thrust headlong into a perfect maelstrom for global malnutrition.

Our current food system is failing to nourish us because we have failed, so far, to nourish the world.

'Nature is sending us a message....that we are playing with fire':

<https://www.theguardian.com/world/2020/mar/25/coronavirus-nature-is-sending-us-a-message-says-un-environment-chief>

We have reached a tipping point where that must change.

The natural environment

Sacrificing wild landscapes and natural habitats on the altar of an insatiable craving for animal protein has unforeseen outcomes according to the US Centre for Disease Control:

'We have to think about how we treat wild animals and nature. Right now we deal with them far too promiscuously':

<https://www.theguardian.com/environment/2020/may/07/promiscuous-treatment-of-nature-will-lead-to-more-pandemics-scientists>

A reduction in human activity arising from Covid-19 has seen the return of wildlife to urban environments and welcome reductions in pollution and greenhouse gas emissions following lockdown, but UN Environment Chief, Inger Anderson warns that maintaining momentum on concerted climate change action with a strong emphasis on human rights is non-negotiable if future pandemics are to be averted:

<https://www.theguardian.com/world/2020/apr/27/halt-destruction-nature-worse-pandemics-top-scientists>

For the food industry, the enormous challenge of a shift towards sustainable production and consumption patterns has been heightened by the unwelcome 'by products' of Covid-19.

Lethal swarms of locusts; floods displacing communities and jeopardising livelihoods and crops across Pakistan, India, the Arabian Peninsula and Africa:

<https://www.theguardian.com/global-development/2020/may/28/make-noise-and-dont-panic-india-tries-to-ward-off-locust-invasion>

have teamed up with Covid-19 in what the United Nations calls 'the triple threat':

<https://www.dailymail.co.uk/news/article-8347225/Locusts-Covid-19-flooding-pose-triple-threat-millions-East-Africa-warns.html>

Added to the likelihood of future catastrophes associated with the spread of zoonotic disease, it will continue to impact supply chains (and the people in them) linked to key commodities and ingredients within the food industry.

Without a properly coordinated response, food insecurities in these regions and beyond will escalate at a time when the food system is already over-burdening our health systems and planetary resources.

Shopping for food

As the pandemic spreads, the interaction between people and the food system became subject to constant flux; changing in unimaginable ways and dictating key aspects of everyday life.

The familiar activity of food shopping assumed an unprecedented significance for people worldwide as one of the only points of contact with what remained of 'normal life'. Supermarkets, grocers and markets became a confronting barometer of the scale of the pandemic. Social distancing measures were implemented, market places shut, vendors prohibited from selling, limits imposed on the number of shoppers, long queues snaked towards purchase points and empty shelves stood witness to the coping mechanisms that many were adopting (United Nations System Standing Committee on Nutrition (UNSCN), 2020, 'Food Environments in the COVID-19 Pandemic 8 April 2020').

Food Foundation data suggests that nearly a fifth of UK families with children have gone hungry during lockdown, amidst problems with food bank supplies and volunteers, faulty meal voucher schemes, and losses in parental income (Iqbal N, 'The Observer', 'Exclusive: almost a fifth of UK homes with children go hungry in lockdown', 3 May 2020):

https://www.theguardian.com/society/2020/may/03/exclusive-fifth-of-uk-homes-children-hungry-lockdown?CMP=share_btn_link

In an atmosphere of frenzy, panic buying in preparation for lockdown caused widespread food products to go out of stock.

The particular foods commonly stockpiled in readiness for quarantine included pasta, rice, flour, eggs, coffee and long-life milk. Shelves were stripped of potatoes and vegetables of any kind (whether fresh, tinned or frozen) and a dearth of baby formula in shops caused its price to skyrocket on platforms such as ebay.

In the USA the purchase of canned meat, oat milk, pulses and legumes surged (Yaffe-Bellany D, 2020, 'A Boom Time for the Bean Industry'):

<https://www.nytimes.com/2020/03/22/business/coronavirus-beans-sales.html>
and some governments responded to the pandemic by adopting protectionist policies.

Serbia stopped exporting sunflower oil and Kazakhstan banned the export of wheat flour and carrots (Wilson B, 'Off out trolleys; what stockpiling in the coronavirus crisis reveals about us'):

<https://www.theguardian.com/news/2020/apr/03/off-our-trolleys-what-stockpiling-in-the-coronavirus-crisis-reveals-about-us>

Across the African continent, many popular informal markets simply closed; risking food insecurity.

Store and online shopping

Another major change has been to the time envelope in which food is sold. Consumers are used to accessing food on a 24 hour basis, but since the lockdown, many supermarkets cut their hours in order to restock shelves and deep clean the store.

Online shopping has increased.

In Canada, 9% of all Canadians now shop online for the first time and it is anticipated that the trend will continue apace (Charlebois S, 2020, 'Covid-19 will forever change the food industry'):

<http://www.canadiangrocer.com/blog/covid-19-will-forever-change-the-food-industry-93894>)

with 20% of all food sold online or via apps within the next five years.

In Saudi Arabia, using apps for food buying has already risen with an increase of 400% in supermarket and hypermarket app installations. Saudi Arabia has also seen a dramatic increase in the use of online food purchasing with 55% now showing online in April, compared to 6% prior to the pandemic outbreak with a particular spike in dairy products, fruit, vegetables and bread (Yu Lim G, 2020, 'E-commerce in Saudi Arabia; Food sales surge amid Covid-19 pandemic):

<https://www.foodnavigator-asia.com/Article/2020/05/06/E-commerce-in-Saudi-Arabia-Food-sales-surge-amid-COVID-19-pandemic>

In the UK, online food sales have surged by more than a quarter this year, with demand driven up by elderly and vulnerable people having priority options for food delivery slots. The range of increase for supermarkets in the number of delivery slots varies from 50-70% (Butler S, 2020, 'UK online grocery sales likely to surge by a quarter amid lockdown'):

<https://www.theguardian.com/business/2020/may/05/uk-online-grocery-sales-lockdown-internet-coronavirus>

Initially, supermarkets struggled to match the higher demand with slots booked up to four weeks in advance and many consumers failing to secure their deliveries.

Food affordability

Prices for basic necessities have been impacted by Covid-19 around the world. Based on data tracking food prices over a 2.5 month period in 10 African and Asian countries, an analysis by the Global Alliance for Improved Nutrition (GAIN) found an average price increase of 6.4% (Nordhagen, S. 2020 'Covid-19 And Food Prices; What Do We Know So Far?'):

<https://www.gainhealth.org/media/news/covid-19-and-food-prices-what-do-we-know-so-far>

Every country showed a price increase for at least 8 of the 14 foods examined (apples, bananas, bread, cheese, eggs, lettuce, beef, chicken, onions, oranges, potatoes, milk, rice and tomatoes). GAIN predicts that while not all increases are significant, those that are can have a strong impact on diet quality.

Covid-19 will further exacerbate existing problems of access to healthy food for vulnerable families in low income countries. Pre pandemic, the International Policy Food Research Institute (IFPRI) estimated that in poor countries, calories from nutrient-rich, non-staple foods (eggs, fruits and vegetables) can be 10 times more expensive than calories from rice, maize, wheat or cassava (Tamrue S, Hirvonen K, and Minten B, 2020, 'Impacts of the COVID-19 Crisis on Vegetable Value Chains in Ethiopia') International Policy Food Research Institute:

<https://www.ifpri.org/blog/impacts-covid-19-crisis-vegetable-value-chains-ethiopia>

In Britain, the pandemic has exacerbated an existing food insecurity crisis.

Research findings indicate that the number of adults who are food insecure is estimated to have quadrupled under the lockdown ('The Big Picture: how is COVID-19 affecting how we feed ourselves?'):

<https://foodfoundation.org.uk/the-big-picture/>

and income losses stemming from the crisis have had a dramatic impact on food security.

Adults reported as self-isolating are at heightened risk of going without food because they cannot leave the home and do not have the means to acquire it (The Food Foundation, 2020, 'Vulnerability to Food Insecurity Since the COVID-19 Lockdown, Preliminary Report', Rachel Loopstra, Kings College London, 14 April 2020).

The absence of essential items in supermarkets has also increased people's reliance per force on smaller local shops where fresh food is more expensive.

Changes to the quality of the diet

School closures have deprived children worldwide of school meals.

Many are from poor households and therefore especially vulnerable to inadequate nutrition and dependent on the daily meal. The World Food Programme anticipates a doubling of those suffering acute hunger (an increase to 265 million) as a result of the impact of Covid-19 (UN World Food Programme 2020 'WFP Chief Warns of Hunger Pandemic as COVID-19 Spreads', Statement to UN Security Council):

<https://www.wfp.org/news/wfp-chief-warns-hunger-pandemic-covid-19-spreads-statement-un-security-council>

Much of the increase in acute hunger will be felt on the African continent.

An additional 300 million people could develop micronutrient deficiencies while the import of crucial nutritional products, used to prevent or treat micronutrient deficiencies or severe acute malnutrition, is disrupted (Haddad L, 2020, 'Biblical, on Steroids, and Across Generations; The Coming Food and Nutrition Crash Can Be Averted if we Act Now to Counter the Covid-19 Crisis', International Food Policy Research Institute).

Many people have switched to heavily processed foods contingent upon panic-buying for items with long shelf-life causing supply-chain disruptions, and reducing fresh fruit and vegetable availability in some conventional supply chains. This spawns vicious circles; diabetes and other diet-related non-communicable diseases are risk factors for Covid-19 mortality and a UK audit showed that 76.5% of critically ill coronavirus patients were overweight.

Long shelf-life foods include cereal bars, dried fruit, peanut butter, crackers and dried pasta. Many are laden with refined sugars and preservatives which are detrimental to oral and dental health – as is the rise in 'snacking' that has occurred during lockdown.

Oral disease affects 3.9 billion people worldwide and untreated tooth decay impacts 44% of the world's population.

In many countries, dental surgeries have been required to close for non-urgent dental treatment (and treatments resulting in aerosol generation eg use of a high-speed dental drill). It is probable that the post pandemic worldwide population will have consumed more 'unhealthy' high-sugar content foods; resulting in an increase in oral disease and dental decay that has not been routinely managed.

In addition, dental decay rate may increase in the child population who have gone without school meals because of school closures.

Home cooking and changes in food preference

Restaurant and other food outlet shutdowns have altered the food environment significantly; with some claims of a health benefit from fast food chain closure (Troop J, 2020, 'A Child's Eye-View on Food and COVID-19: The Imperative to Build Back Better Nutrition Connect').

There has been a shift to home cooking and in China it is a new norm Geraghty M, 2020, 'Covid-19 is Changing the Food Industry' in place of store-bought family meals:

<https://sensientfoodcolors.com/en-us/global-markets/covid-19-changing-food-industry/>

Prior to Covid-19, 26% of the Chinese population cooked 'from scratch'; now this is 40% (Rodrigues M, 2020, 'Lessons from China's Recovering Food and Beverage Sector After Covid-19'):

<https://www.kerry.com/insights/kerrydigest/2020/china-food-and-beverage-after-covid-19>

and there has been a shift to buying fresh vegetables, meat, uncooked noodles, less 'eating on the go' and a continued trend to online purchasing.

The USA are showing similar shifts towards fresh food, more home-cooked and home-eaten foods and more than 50% of people are now eating in this way (FTI Consulting, 2020, 'Covid-19: Impacts on the US Food Industry'):

<https://www.fticonsulting.com/insights/articles/covid-19-impacts-us-food-industry>

In the UK, 1 in 5 people now cook every meal from scratch in comparison to 1 in 8 prior to lockdown (Goodwin K, 2020, 'Covid-19: How pandemic could change food preferences'):

<https://www.thenational.scot/news/18405936.covid-19-pandemic-change-food-preferences/>

However, an uptick in the availability of 'child-friendly' recipes (to engage children who are stuck indoors) and potential positive impacts for food and nutrition education at home has been countered by a boost in the popularity of long-lasting highly processed foods. Home baking and comfort-food eating have increased; both adding to the daily calorie load (Time Magazine, 2020, 'Our diets are changing because of the coronavirus pandemic. Is it for the better?'):

<https://time.com/5827315/coronavirus-diet/>

Meanwhile, those with limited cooking knowledge or access to educational tools for food safety or nutrition are left to fend for themselves.

China has seen something of a volte-face in food preference.

There has been a surge in the purchase of foods that are claimed to support healthy immune function, including so-called 'super foods', such as oats, mushrooms and yeast (although more scientific research is needed concerning the benefits) plus calls for more plant-based meat alternatives for the future (Dutkiewicz J, Taylor A and Vettese T, 2020, 'The Covid pandemic shows we must transform the global food system':

<https://www.theguardian.com/commentisfree/2020/apr/16/coronavirus-covid-19-pandemic-food-animals>

because of fears that the virus break-out was caused by animal products (Quilter J, 2020, 'Immune Health Ingredients and the Importance of Quality Clinical Research':

<https://www.kerry.com/insights/kerrydigest/2020/immune-health-ingredients>

The sale of black beans and pinto beans has risen by 400%; they are known to be nutritious, versatile and can be stored for up to two years (Yatte-Bellany D, 2020, 'A Boom Time for the Bean Industry'):

<https://www.nytimes.com/2020/03/22/business/coronavirus-beans-sales.html>

Impact on the food industry

'A Report on the Global Business Impacts of COVID-19':

<https://www.sedex.com/wp-content/uploads/2020/05/Sedex-Insights-Report-COVID-19-Impacts-on-Businesses.pdf>

found that the most common problems cited by industries where demand was consistent or increased (such as the food sector) related to labour, materials and infrastructure on the ability to supply food during the pandemic.

99% of those surveyed reported taking major initiatives to protect their workforce and within the food industry, the disruption to foodservice outlets such as restaurants caused respondents to report expected further negative consequences of a narrowing customer base and shifting consumption patterns, despite retail outlets remaining essential during lockdown.

Negative consequences were anticipated more frequently in developing economies where the knock-on effects to already fragile supply chains may be more enduring.

Food businesses now exposed as engaging in previously invisible human rights abuses (including widespread use of low-paid migrant workers in the slaughterhouse, meat-packing and intensive farming sectors) are also likely to

experience longer recoveries due to shifting public opinion on the safety and ethics of how we treat people (and animals) in the human food system and the heavily marketed, cheap and abundant products within it (Nestle M, 2020, 'A Call for Food System Change', The Lancet, Perspectives, 395, p1685-1686):

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7255748/>

The report concludes that businesses overall are experiencing a 'total change' in business realities and security and recommends alterations to purchasing practices and further investment in worker recruitment, health and safety.

This necessary inward focus on policies, practices and people offers an opportunity to adopt new models to transform businesses as collaborative purpose-driven forces for good; a critical component of recovery in a post-coronavirus economy (EDIE 'Paul Polman: Why partnership and purpose are critical to business survival'):

<https://www.edie.net/news/7/paul-polman-unilever-imagine-interview-business-purpose-partnerships-coronavirus-survival/>

Not all industries or businesses will be able to achieve this long-term vision.

Giants in polluting industries including industrial agriculture are predicted to collapse; endangering livelihoods and the lives of millions around the world. It is therefore incumbent upon the future-facing food industry and policy makers to work in tandem to regenerate the job market around healthy and sustainable food production models.

Policy co-ordination, regulation and incentive from governments

Concerns were expressed to the Prime Minister in March 2020 by three food policy academics as follows:

1. Public messaging about food supply is weak and unconvincing: Supermarkets were subject to purchasing stress and responded by rationing some foodstuffs which could have been avoided by more consumer-friendly messaging
2. Official thinking and consultation on food has so far been dominated by an industry focus: Food crises required leadership and action from local authorities and the Resilience Forums. These local bodies have been weakened and dangerously under-resourced
3. Prioritising people on low incomes: More than 8.4 million people in the UK are food-insecure. The current crisis is in danger of aggravating existing problems (Lang T et al, 2020, Letter to Rt Hon Boris Johnson, Prime Minister. Food Planning in Crisis, 20 March 2020).

The authors called on the Government to initiate a health-based rationing system scheme, review options for ensuring people on low incomes have sufficient money to buy a healthy diet, including a national voucher system, nutritious food delivery to self-isolating or quarantined individuals, a food rationing scheme and amendment of the Agricultural Bill adding a new clause to ensure that the people of the UK will be fed well, healthily, equitably and sustainably.

Whilst good hygiene practice remains the best means of avoiding infection, a healthy balanced diet can help to support healthy immune function. One of the authors, Professor Erik Millstone commented:

'So the government urgently needs to develop and implement policies to ensure that everyone has enough of the right kinds of food to combat this pandemic.' (Quadir S, 2020, 'Healthy eating important in COVID-19 fight, experts warn Government', City University, 3 April 2020.)

Resilient and ethical investment will be crucial; including into plant-based foods to encourage 'dietary change towards less beef usage' according to a new report by UN-backed Principles for Responsible Investment in order to match delayed and disruptive policy measures and protect financial markets (PRW, May 2020, 'The Inevitable Policy Response' Investor Report):

<https://www.unpri.org/download?ac=9833>

Human health and wellbeing are more imperative than ever as international efforts are seen to fracture.

The US departure from the Paris Agreement has now been followed by their exit from the World Health Organisation; thus removing over \$400 million a year in funding (Borger J, 'Trump announces US to sever all ties with WHO', 29 May 2020): <https://theguardian.com/us-news/2020/may/29/trump-who-china-white-house-us>

Yet the lasting shifts and themes thrust upon us by Covid-19 could lead to a better worldwide food system as part of a new norm that prioritises nutritious food choices. If this pandemic has taught us anything, it is that our health, food system and environment are held in common.

They do not discriminate between borders.

If we are going to turn what has been the most devastating shared horror story of the 21st century into a common good; competing concerns within and between countries must end.

The food system offers us that vital opportunity.

Recommendations:

- 1.1 After Covid-19 food system responses must be sensitive to the most vulnerable
- 1.2 As the Sustainable Development Goals are interlinked, investing in food and nutrition security (SDG2) will drive progress on the 2030 Agenda more broadly
- 1.3 Remember in policy formulation that addressing hunger, hidden hunger and child malnutrition is central to a Covid-19 response
- 1.4 Improve data and surveillance systems to monitor Food Safety News (FSN) worldwide to ensure a more dynamic response
- 1.5 Maintain and increase the coverage of essential nutrition programmes
- 1.6 A Food and Sustainability Act and a Minister for Food Security to drive action and accountability on British food security and food justice.

2. LIVING THROUGH A PANDEMIC: EXAMPLES, EXPERIENCE AND CASE STUDIES DURING THE TIME OF COVID-19 IN THE UK

The global Covid-19 pandemic has torn through society shattering every aspect of human life. Within months, the fragility of the food system has been laid bare; established inequalities exposed and new ones unleashed. The economy has plummeted and over five million householders have struggled to feed their families (Food Foundation 2020):

<https://foodfoundation.org.uk/new-food-foundation-survey-five-million-people-living-in-households-with-children-have-experienced-food-insecurity-since-lockdown-started>

While change on all fronts has been universal; people in the UK have had radically different experiences and if we are to build a more equitable, sustainable and resilient food system from the debris of Covid-19 their voices must be heard.

These case studies arise from interviews with mothers in London. We are grateful for the support from the Coin Street Neighbourhood Centre, SE1 and Community Action Centre, 2000, SE8.

'Nikita' and 9 year-old Daisy

Nikita, a single parent of Asian ethnicity and 9 year old daughter, Daisy live in social housing without access to outside space in a deprived part of Hackney. A full-time mother with a Business degree, Nikita receives state benefits sharing Daisy's care with dad who lives separately. Her income has not been affected by the pandemic.

Since lockdown, she needs to shop more often and has added financial stresses. Despite entitlement to free school meals, Nikita has not received vouchers or a food bag from school. Daisy previously took packed lunches, 'dropped off the list' and the administrative system failed to reinstate her. Without help from dad, Nikita would be in debt and resorting to food banks.

Nikita is concerned about Daisy's weight. She now consumes more carbohydrates and Nikita thinks she is comfort-eating due to missing school, friends and routine. Her sleep patterns have shifted to later and Nita worries that it will be difficult to re impose pre-pandemic routines.

'Gloria' and two young children

Single mum and trainee teacher Gloria has two degrees. She lives with her 3 and 6 year old children in an area of social deprivation with no balcony or garden.

Gloria's state benefits are capped because of a small savings pot and pre-pandemic, she had £70 per week to cover everything including utility costs and a £30 weekly food bill. Her income is unchanged. The children are entitled to free school meals and healthy-start vouchers for the youngest. One has significant food allergies and the family eats a vegan diet.

Gloria's main shop was at Lidl; she would also hunt around elsewhere for best value products:

'I was already on the breadline in terms of going into food poverty. It was already difficult to get the food I need for the family...you have this freedom when your child's gone to nursery, you can go further, to one (shop) where the flour's cheaper and another where the broccoli is and so on...it's not possible to shop like that nowadays.'

Family food costs have risen to £40 per week and Gloria's problems include accessing supermarkets and free school meal vouchers. As supermarkets emptied of vegan basics, she considered changing diets. She has become reliant for food on a working friend and her wider community around the social supermarket; her main food source.

The younger child has returned to frequent breast feeding, spoon feeding and using food to seek mum's attention. Gloria feels forced to (sparingly) use sweets and TV to manage her children's expectations. Her children don't go hungry – but only due to the support of friends and the local community:

'I'm worried that if my friend who's helping me is taken ill what would we do? You can call on someone once - but relying on people around you makes you more vulnerable. I hope to regain independence around the most basic thing that we have - that is feeding ourselves.'

'Joanne' and 'Julie': family support workers

Joanne and Julie work at a Family Centre in South London. They see extended families having to reduce their support due to job losses; routines splintering; children snacking more and parents fretting about child weight gain and nutrition imbalances; there are disruptions to weaning and parents have become dependent on TV and food as child pacifiers. Meal planning from food parcels and donations is difficult when supply is uneven and content unknown and unfamiliar. Joanne says:

'Some are already getting help but there's new families coming because they don't have the money, furloughed or were having support from a group church or

something and now everything is closed...parents cannot shop as they usually do.... food is becoming really expensive, unpredictable... no child-friendly access in supermarkets...cannot get delivery slots...transport, some of the people do not live close to a big supermarket and they find the local Sainsbury or Tesco way too expensive...Food boxes, eg from Kitchen Social, families find it really difficult not knowing what they'll get in the box. Sometimes, it's not enough. There are children with special needs. Parents are really struggling with what to cook. They just get what they get and have to make do with it.'

'What I'm finding is that parents are not eating as much...only one meal a day...The child is not seeing mum and dad eating so it's about the social-learning element of it as well...A lot of children now are grazing; not sitting down eating because the parents don't. So it's really interesting about social eating. Families reliant on the food banks, it's mainly dried food like pasta or tins; there's not much fruit or veg in there.'

The family support workers worry that parents will struggle when the emergency food services are wound down. They have seen an increase in vulnerabilities and families needing help but the short-term funding relief will not lead to sustainability. Where support systems are assigned via postcode, poor families who happen to live in a seemingly affluent area are slipping through the net.

Parents associate food bank dependence with loss of autonomy, confidence and increased precarity. There is trepidation for the future; anxiety over the looming recession and worries that job losses will deepen inequalities, entrench poverty and further compromise children's diets and health. The number of families struggling will increase in the coming months and years.

In a public survey conducted by The British Dietetic Association during the period of 15-22 May 2020, 130 families shared experiences about how the pandemic impacted their households' food and eating patterns:

<https://www.bda.uk.com>

The examples below illustrate how their lives have changed.

People's capacity to react and adapt has been resource-dependent and health inequalities have intensified. Often a complexity of factors is described in each case; showing how dieticians have supported and advised parents to adapt care plans whilst taking into account wider food intake issues:

'The mother of one of my patients on the ketogenic diet is a key worker in a supermarket. I wrote to the GP to ask him to consider writing a letter of support to the mother's employer as she was his main carer. I had concerns how he would

adhere to the diet while spending all his time at home without his mother present to prepare his meals and without support from school or other family members usually involved.'

Many parents of children with diagnosed illnesses reported difficulty accessing the foods required to support medical conditions (either due to shelf availability or the caps that retailers had to place on specific products). The reduced availability for example of specialist food, gluten-free food products or specific brands of acceptable items impact long-term health and compliance with necessary diets:

'Really struggled finding gluten-free products for my coeliac daughter.'

A family health dietician in the Western Isles said:

'Some families are finding it difficult to get the items they require, particularly in the early stages of lockdown where people were panic buying and as such some of the specialist products they required eg gluten-free pasta, gluten-free flour, lactose-free milk, plant-based drinks etc were not available as people had been buying them if the regular products were not available.'

They further reported not only a shortage of specific items but also how the whole shopping process was challenging in terms of family circumstance:

'Access to fresh fruit and vegetables was limited initially; it is now easier to buy products but families struggle with having to queue outside the supermarket and single parents particularly find this difficult as they have to take their child with them.'

Dieticians working in the mental health services report further problems of food access for those caring for children with mental health disorders; particularly eating disorders.

New supermarket rules such as 'you touch it, you buy it' have added an unwelcome dimension to the necessity of checking labelling for ingredients or 'best before and use by' dates. Beat Eating Disorders have reported a 35% increase in calls to their services and writing on the site, Hope Virgo outlines the extra challenges faced:

<https://youngminds.org.uk/blog/coping-with-an-eating-disorder-during-the-coronavirus-pandemic/>

Some care-givers however said that having more time for food preparation or alteration to their usual life stressors had resulted in more relaxed mealtimes.

Families with children on the autistic spectrum or children expressing particular food preferences have been unable to buy the usual food that their children accept. However, dieticians say that some of the children have begun to try new foods or brands during this unprecedented time:

'My daughter is type 2 diabetic and her blood sugars have been better controlled during lockdown as I have had time to contemplate meal construction.'

Other families have said that enforced working from home has meant reassigning a kitchen as 'the office' and a dining table as 'the work desk' resulting in the transformation of mealtimes into 'eating food on laps in front of the TV':

'I'm looking forward to getting my kitchen back and eating at the table again.'

The Covid-19 pandemic has found local authorities forced to deal quickly with new emergencies; in particular the burden of food insecurity affecting children, young people and families. Newcastle City Council and Hampshire County Council case studies are outlined below.

Newcastle City Council Food Insecurity Response

Food insecurity was significant for Newcastle people during the pandemic. Residents already suffer disproportionately from three main risk factors; unemployment, long-term disability or health problems and low income. Newcastle has 24.7% children living in poverty compared to an England average of 17% (HM Revenue and Customs, Personal Tax Credits; Related Statistics - Child Poverty Statistics).

Over a quarter of Newcastle children receive free school meals compared with 13.5% nationally (Department of Education School Census) and 40.4% of year 6 Newcastle children are overweight or obese compared to 34.3% in England (National Child Measurement Programme).

Local families faced challenges in providing children with healthy food and lifestyles prior to Covid-19.

Pandemic control measures resulting in higher food bills and lower incomes are likely to increase the number of food-poor households.

Evidence from the local authority public health team indicates that food insecurity associated with poverty increased during the pandemic and new food insecurity was linked to health and social vulnerabilities exacerbated by the national lockdown.

Supermarket unit restrictions acted as barriers for large families; families with young children experienced scarcity; food bank providers and parcels for the shielding community did not meet the needs of those with dietary requirements, families with wide-age spread children or the BAME population (particularly during Ramadan).

People without access to cash or self-isolating single parents could not get to shops and many families lacked financial support because of cumbersome Universal Credit procedures. The self-employment/furlough schemes have led to families being unable to demonstrate poverty to access free food or qualify for free school meals.

Specific measures to help families with children include a new dedicated crisis support service; action to support essential products in the early years; enhanced support for the free school meals voucher scheme and breastfeeding help.

Citylife Line Crisis Support:

The council set up a crisis support service, matching families with appropriate support (for most residents this involved support in accessing food due to the public health restrictions as they were isolating/ were without social support).

For those experiencing food poverty, or with emergency food requirements, the council provided referrals to suitable VCS food providers and where necessary, supplied emergency food parcels for households, checking dietary requirements or size/ages of residents. 49% were households with children (18% of all requests being from single parents and 10% families with three or more children). In addition, the service includes a supply of sanitary products and first milk/nappies.

Early Years Support:

Public health identified early that essential resources for families with young children were scarce in shops and unavailable to VCS food providers.

These included hygiene products, first milk, nappies and oral health items; due partly to initial stockpiling and latterly, to poverty and reduced household budgets. Newcastle City Council Community Family Hub staff coordinated purchase, packaging and distribution of essential infant and toddler items to needy families each week; in line with the UNICEF UK Baby Friendly Initiative.

Families requesting help who were previously unknown to children's services were followed up to assess for further needs. Positive outcomes of the intervention in addition to fulfilling residents' immediate needs included:

- Improved collaboration with schools over Early Help assessments
- Development of links with local sexual health services
- Improved intelligence sharing with Citylife Line to better appreciate families' difficulties.

The work highlighted an increased demand for help in accessing other essential items including sanitary and incontinence products (which impact on the overall household budget).

School-age Children:

Newcastle welcomes the free school meals payments but concerns exist about children's access to meals.

Changes to the e-gift card/voucher system are needed to maximise equity of access to quality food for children. In response to these shortcomings, Newcastle City Council produced and disseminated an information guide with a short animated film on feeding your child when on a low budget:

<https://biteable.com/watch/top-tips-for-feeding-your-child-on-a-low-budget-2510488>

A resource for families on protecting oral health is in development and subject to formal evaluation.

The Government's Question and Answer resource on the free school meal voucher scheme was translated into several languages to support the BAME communities. In addition, Newcastle City Council formally raised concerns to the DEFRA Select Committee Food Insecurity Evidence Review regarding the free school meal e-gift card purchases not excluding age-related products (meaning some adults may decide to spend them on alcohol, tobacco or lottery tickets thus depriving their children of a meal that would otherwise be provided in school).

Breast feeding:

The Newcastle City Council breast feeding peer support service continued to support women to breast feed via social media and other online support.

Breast feeding rates on hospital discharge saw a 9% increase between February 2020 - April 2020 and the public health team will continue monitoring data to

review practices and share learning. The public health, health visiting and community family hub teams collaborated to continue to access Healthy Start vitamins for pregnant women and children up to 4 years of age.

Hampshire County Council Catering Services (HC3S) Free school meals response

Multi-award winning HC3S are currently Education Caterer of the Year with a mission to provide children with nutritious meals and inspire enthusiasm for healthy eating. For 30 years they have supplied education catering in Hampshire and parts of Wiltshire and Dorset; a total of 69,000 freshly-cooked meals per day.

HC3S teams have risen to the pandemic crisis:

Keeping parents engaged has been vital and the existing service use of social media channels has been maximised to provide practical help via 'rescue recipes', food hacks and tips to make the most of cupboard items as well as weekly meal ideas and shopping lists for the £15 voucher to encourage cooking from scratch and sensible spend.

Parents were polled about recipe content and to ascertain if they felt ready to return their children to school (68% were not). Positive parental feedback indicates that needs and expectations have been met.

Successes:

- Adapting quickly together with schools and suppliers to ensure provision of hot school lunches for key worker and vulnerable children
- Multiple weekly cold takeaway toolboxes for parents to collect to make up their own lunches from a balanced and nutritious range of items
- Supplying catering to four Hampshire schools when they were let down by contract caterers ensured that free school meal and key worker children were still fed
- Providing a new service throughout school holidays and bank holidays to reduce food insecurity (staff have been willing to do this despite their own personal circumstances; thus strengthening relationships with schools).

Challenges:

- As a local authority caterer, meeting overheads and staff costs is a struggle. Non-profit making HC3S has mitigated costs where possible including use of the furlough scheme
- In receipt of virtually nil income during this time and facing financial uncertainty
- Low stock due to distributor causing challenges in the supply chain

- Waiting for a decision on school opening has made staffing decisions and forward planning difficult
- Uncertainty about the level and continuance of the UIFSM in September
- The above have created a climate of uncertainty for the rest of the year and into 2021.

The new normal:

The service will continue to be updated and reviewed in accordance with listening to parents and school communities. All risk aversion procedures relating to Covid-19 must be satisfied as well as continuing to meet the school meal plan. The service remains committed to ensuring that children continue to receive a nutritious school meal which will allow them to grow and flourish.

Habits at home

Hubbub's national survey has shone a light into the nation's kitchens during the pandemic and the findings in relation to children's health are mixed:

<https://www.hubbub.org.uk/blog/how-has-covid-19-changed-our-eating-habits>

More than 57% say they value food more since the restrictions started (those with young children and a BAME background were most likely to strongly agree; also that they were worried about the extra expense of feeding their households).

44% were enjoying cooking more; those with children aged 1-9 were most likely to strongly agree. More than half of young people (47%) saw lockdown as an opportunity to acquire more cooking skills and 45% of the overall population expressed a strong desire to acquire growing skills in order to increase their resilience in preparation for further shocks.

However a quarter had found preparing daily meals exhausting. Alongside young people, 38% of BAME respondents compared to 23% of white respondents agreed/strongly agreed. Those with children below one reported the highest levels of exhaustion.

49% of respondents with children reported more eating together as a family but 23% have had to restrict the number of their children's snacks in order not to run out of food. 36% of all respondents reported comfort-eating more during lockdown and 26% said that they were eating more healthily (33% for BAME households and those living in London and Northern Ireland).

Within the UK, organic and plant-based foods have seen uplift. Kantar report a 25% increase in plant-based food year on year (Dawson, Abbey, 2020, 'Meat and milk supply struggles push Brits to plant-based options'):

<https://www.thegrocer.co.uk/plant-based/meat-and-milk-supply-struggles-push-brits-to-plant-based-options/604859.article>

Ato Ecovia Intelligence sees such uplift as evidence of an appetite for healthier diets (Askey, Katey, 2020 'Is coronavirus changing how we eat?'):

<https://www.foodnavigator.com/Article/2020/05/11/Is-coronavirus-changing-how-we-eat>

There is as yet no data to interpret what the impact of reduced access to the fast food outlets commonly found outside schools has been on pupils' health. However, 43% of Hubbub respondents are buying fewer takeaways due to worries about contamination. A further 42% say that they are not buying them because money is tight (70% for 16-24 year olds).

Over 85% of Hubbub respondents planned to continue many cooking and shopping habits formed during lockdown including meal planning, batch cooking and sourcing locally.

Rising food insecurity

By late March, Food Foundation research found that three million people in Britain had gone hungry since the start of the crisis. By May five million people in the UK in households with children were experiencing food insecurity (Food Foundation 2020):

<https://foodfoundation.org.uk/new-food-foundation-survey-five-million-people-living-in-households-with-children-have-experienced-food-insecurity-since-lockdown-started>

1.8 million households experienced food insecurity solely due to the lack of supplies in shops, leaving 3.2 million food insecure because of other issues including loss of income or isolation.

Households with a BAME adult (compared to white ethnicity respondents) with members self-isolating, where an adult has a disability or with children dependent on free school meals are 1.5 times more likely to experience food insecurity (Food Foundation, 2020 Polling: Third Survey):

https://foodfoundation.org.uk/vulnerable_groups/food-foundation-polling-third-survey-five-weeks-into-lockdown/

By May, 8% of UK households with children had tried to or submitted a new Universal Credit application (ibid).

More than 900,000 children have relied on low-cost food; 1.3% have been without balanced meals; 350,000 have had insufficient to eat and 238,000 have skipped meals because they have run out of food and been unable to replenish stocks.

Felix from Harpley, Norfolk comes from a family of 9. His school-aged siblings normally have a free school meal but because they are all at home it is necessary to restrict food:

'We can't snack so (my sisters) get tired...We're having essential food and plain food like pasta or pizza' (Food Foundation 2020 Audio Bite, Felix):

https://foodfoundation.org.uk/wp-content/uploads/2020/05/felix-audio-bite_1.mp3

The Trussell Trust reports an 81% increase in people needing food bank support at the end of March 2020 compared with the same time in 2019. NGOs, independent food banks, local authorities, community groups and others have also supplied food to the most vulnerable people. One example is the Community Fridge at St George the Martyr Church, Southwark:

'We started by massively ramping up our surplus food collections and added in Fare Share deliveries, and now receive over a tonne of food to redistribute a week. We recruited an amazing new team of 40 volunteers who unpack and sort surplus, help cook healthy meals to be frozen and then deliver food packages out to households.'

In a blog on the Independent Food Aid Network, IFAN coordinator Sabine Goodwin argues that UK food aid is unable to meet growing demand:

'There is an absence of meaningful financial support from the Government to enable people on low or no income to be able to afford to buy food....And beyond the enormity of short-term need, the long-term mental and physical health implications of reducing millions to rationed tins and desperation appears not to have factored into any Government decisions so far. (Goodwin, Sabine, 2020 'Between the devil and the deep blue sea'):

<https://www.foodaidnetwork.org.uk/blog/between-the-devil-and-the-deep-blue-sea>

Local authorities have directed food provision to vulnerable people and the Government have insisted that food boxes contain essential supplies and household items.

However, reports find that some boxes circulated by the Government contain unhealthy, inadequate food. Boxes received from the Government for distribution by Rochdale Council contained chocolate bars, biscuits, sugary cordial, teabags, noodles and an apple (BBC, 2020, 'Coronavirus: Rochdale Council tops up

'unhealthy' food boxes'): <https://www.bbc.com/news/uk-england-manchester-52105260>

The mayhem surrounding free school meals has been widely covered elsewhere; some specific difficulties are expressed below.

Acting head of a primary school in North East Somerset: mid May 2020:

'Regarding FSM, it was only FSM children who were entitled to the vouchers (not the infant children). One family didn't have access to a car, so we had a set daily amount set up with the local shop to pay for the child's food for lunch and breakfast. One family didn't have any internet, so we got the vouchers for them and posted them to their home. The other 11 families were all given codes for the FSM vouchers from Edenred to print off. A few families were having issues getting through to Edenred (as the nation was) but eventually it did all work' (Food Foundation, 2020 Polling: Third Survey as above).

Bradford primary teacher and Hubbub correspondent; 20 May 2020:

'We're only at 17% for FSM as we have a number that aren't eligible due to recent arrival in the UK. We've been working with another school to provide food parcels using our normal food supplier. Have tried the government voucher scheme but it wasn't really fit for purpose as the voucher scheme was delayed and relied on families having internet use.'

Breakfast provision

The Government made a commitment to support schools who would usually benefit from the DfE breakfast club programme; an estimated maximum of 1,800 (Whittaker Freddie, 'DfE extends breakfast clubs pilot to 2021'):
<https://schoolsweek.co.uk/dfe-extends-breakfast-clubs-pilot-to-2021>

Therefore, as with emergency food aid, communities, schools and NGOs have been left to fill in the gaps.

School Food Matters partnered with Guys' and St Thomas' Charity to deliver Covid-19 support to schoolchildren via their Breakfast Box project 'School Food Matters 2020 Healthy Breakfast Boxes' :

<https://www.schoolfoodmatters.org/projects/healthy-breakfast-boxes>

It aims to expand breakfast provision to all families in Lambeth and Southwark who are vulnerable to food insecurity by providing each household with a box continuing a fortnight's supply of nutritious breakfast foods.

A head teacher in Southwark said:

'The families were so grateful. They came to the school as soon as I contacted them to say they could collect.'

Parents in Lambeth stated:

'This really helps with social distancing as now I don't need to go to the supermarket.'

'This is so useful, especially as there can be a long wait for universal credit.'

(Quotations supplied by Georgie Branch, School Food Matters Co-coordinator in Hubbub correspondence, 21 May 2020).

Following a campaign led by England and Manchester United footballer Marcus Rashford, the UK Government finally committed to provide free school meals to children in England during the 2020 summer holidays, a £120 million "Covid Summer School Fund". The Government statement says it was in recognition of "the unique circumstances of the pandemic." COVID-19 is having a devastating impact on household food security. According to Marcus Rashford, Wembley Stadium could be filled more than twice with children who have had to skip meals during lockdown due to families not being able to access food (200,000 children according to The Food Foundation). Whilst 1.3 million children in England are registered for free school meals, one quarter of these children were not given any support since the school closures were ordered.

To quote from two young people:

"Millions of young people in the UK have been affected by food insecurity and poor food quality in the COVID-19 crisis and will continue to be. The Government needs to ensure young people - especially those with lived experience - are involved in finding long-term solution to these problems." Dev. Young Food Ambassador, England. (The Food Foundation)

"Many parents are ashamed that they can't always feed their children." Shane. Young Food Ambassador, Northern Ireland. (The Food Foundation) Ref : Marcus Rashford letter: Read Manchester United striker's plea to government in full. The Independent. 15 June 2020. The Food Foundation (2020) Children's Right2Food Charter. Policy Progress Review. London.

A new Government report 'Tackling Obesity: empowering adults and children to live healthier lives', published on 27th July 2020, confirms that tackling obesity is one of the greatest long term health challenges that the UK faces with two-thirds of adults being above a healthy weight and of these half are living with obesity. Obesity prevalence is highest amongst the most deprived groups and children in

the most deprived parts of the country are more than twice as likely to be obese as their peers living in the richest area.

Dame Sally Davies, in her final report as Chief Medical Officer, challenged the Government's ambition to halve childhood obesity by 2030 - in England we are nowhere near achieving this.

All of the examples in this chapter are taken from 'lived experience' during a pandemic, but food anxiety in the UK is unlikely to diminish when Covid-19 has been consigned to memory. Many households will face economic hardship for years to come.

Alongside a 'two-tier' food system (those on low incomes struggling to access healthy food) the nation's divided food experience is further exacerbated by a newly emergent 'two-tier' employment benefits system; those on furlough or with self-employed benefits versus those on universal benefits.

Ultimately, health and wealth inequalities within the UK have been further polarised.

There is an urgent and undeniable need to build a more equitable and resilient food system in the wake of Covid-19.

Alison Garnham, Child Poverty Action Group, states,

"We all want a safety net that can bring families through tough times but today's figures show we no longer have that in the UK. Instead when a crisis strikes, we have more and more children at food banks. That isn't right."

Ref : The Trussell Trust (2020) A new coalition of charities is coming together to call for change as Food Banks record spike in need.

<https://www.trusselltrust.org/2020/05/01/coalition-call999>

Recommendations:

- 2.1 Co-ordinate for future resilience via a Cross Government Committee to coordinate food policy actions and responses to the pandemic. Health issues should be factored into the Agriculture Bill
- 2.2 Establish a 'Right to Food Framework' including a legally binding universal right to food alongside a broader incorporation of socio-economic rights. Abolish a 'no recourse to public funds' condition in order to safeguard migrant communities from destitution:
https://www.sustainweb.org/publications/covid_19_right_to_food_nrpf

- 2.3 Explore all possible routes for financial support to households with children: Child Benefit, Universal Credit, welfare assistance grants – and remove barriers to accessing this support (like the five week wait on Universal Credit, benefit cap and child limit)
- 2.4 Stop marketing aimed at children in packaging on TV, near schools, online and on social media and create an Independent Children’s Food Watchdog
- 2.5 Improve and extend school meals reach and guarantee that support is available during all school holidays
- 2.6 Address short, medium and long-term food insecurity via a National Plan; overseen and coordinated by a Minister for Food Security.

3. BRAVE NEW WORLD: THE WAY FORWARD AFTER COVID-19

Once the Covid-19 crisis passes, unless the food system is redesigned, this pandemic will not be the last.

Recovery, resilience and 'building back better' will take the audacious collective belief that a regenerative food system can deliver environmental, social and economic healing – and leave no one behind.

'There has been so much response to Covid-19 but much of it has treated it as a medical challenge or an economic shock,' said Professor Delia Grace, the lead author of the report by the United Nations Environment Programme (UNEP) and the International Livestock Research Institute (ILRI).

'But its origins are in the environment, food systems and animal health. This is a lot like having somebody sick and treating only the symptoms and not treating the underlying cause, and there are many other zoonotic diseases with pandemic potential':

<https://www.theguardian.com/world/2020/jul/06/coronavirus-world-treating-symptoms-not-cause-pandemics-un-report>

The way in which live animals and their bodies have been entrapped, abused and processed is beyond the safe boundaries of human health.

Industrial processes have served to institutionalise blind spots for human and animal rights atrocities on a grotesque scale and until now, governments have been reluctant to intervene.

'If you want to create catastrophic pandemics, then build factory farms' says Dr Michael Greger, an infectious diseases expert who fears that the current coronavirus could be followed by something much more deadly.

'If you crowd tens of thousands of chronically stressed animals into cramped, football field-sized sheds to lie beak to beak, or snout to snout, on top of their own waste, it's a breeding ground for disease'

On the outskirts of a town in an industrial region of Germany is the modern equivalent of a leper colony. Amid a local coronavirus spike, police have sealed off an entire housing estate and put up 8ft-high metal barriers to stop residents leaving –regardless of whether they have the disease or not.

'What all the residents have in common is that they work at, or live near, a giant meat processing plant at the centre of the outbreak ... It would be good to think the spike in this part of Germany ...is just a one off. But the fact is that in many

countries, including Britain, meat factories have become breeding grounds for Covid-19':

<https://www.dailymail.co.uk/debate/article-8490351/More-giant-factory-farms-inevitably-means-create-deadly-pandemics.html>

There is a worrying pattern of concerted Covid-19 outbreaks within UK factory farm and meat processing facilities typified by the closure of sites belonging to industrial chicken processor Two Sisters (BBC, 23 June 2020, 'Coronavirus: 200 cases at Two Sisters meat plant outbreak in Llangefni':

<https://www.bbc.co.uk/news/uk-wales-politics-53152362>

A report by the European Federation of Food, Agriculture and Tourism Trade Unions (EFFAT) has condemned the 'appalling' conditions of meat processing plants, citing 'exploitative' working practices and instances of the maltreatment of both animals and workers – in particular migrant and ethnic minority employees (EFFAT, 2020, 'EFFAT meat sector report: poor conditions to blame for spread of Covid-19'):

<https://effat.org/in-the-spotlight/effat-meat-sector-report-poor-conditions-to-blame-for-spread-of-covid-19/>

More recent incriminating evidence is the discovery of viral infection in an industrial pig factory in China with future pandemic potential:

<https://news.sky.com/story/new-swine-flu-found-in-pigs-in-china-with-human-pandemic-potential-12017782>

It is now incumbent upon the UK Government to confront its own culpability in encouraging exploitative, reckless practice - combined with a failure to observe the highest standards of accountability in the use of public money.

Recently, the Bureau of Investigative Journalism and 'The Guardian' unveiled the UK as a major funder of development banks which promote environmental damage, low-welfare feed lots, abattoirs and industrial scale 'mega farms' in developing world countries to include Niger, Ethiopia and Uganda (The Guardian, 2 July 2020, 'Revealed: development banks funding industrial livestock farms around the world'):

https://www.theguardian.com/environment/2020/jul/02/revealed-development-banks-funding-industrial-livestock-farms-around-the-world?CMP=share_btn_tw

The practices (supposedly 'benefitting' local farmers and 'satisfying' increased demand) simply shift the burden of environmental pollution, antibiotic overuse and poor working conditions onto the world's poorest communities; directly fostering increased consumption through supply chains whose total 'bill for damage' dwarfs any small efficiencies in energy and carbon for animal products.

The winners are the globalised multinational organisations (with a stranglehold on agricultural supply chains via their harmful intensive agriculture practices) rather than population health and social mobility.

If it is once again to lead the world on food standards by championing farms, not factories, the UK must act to end factory enslavement by outlawing such practices (Evening Standard, 2020, 'The Reader: Britain can be a beacon on food standards'): <https://www.standard.co.uk/comment/letters/the-reader-britain-can-be-a-beacon-on-food-standards-a4465021.html>

Dietary diversity

Diversity in food systems is the key to future resilience.

Making low-cost ingredients the Holy Grail has concentrated food and power in the hands of a small number of large farms, intensive monocultures and integrated supply chains. The myth that hunger is vanquished by producing more calories (with no focus on what is being grown) is pedalled to justify the growth of monocultures.

The outcome has been a failure to conquer hunger combined with sparking an obesity pandemic and the system has robbed soils, farms and eco systems of complexity and diversity whilst taking a terrible toll on the environment.

However, Covid-19 has given new impetus to a transition to a healthy and vibrant food and agriculture system based on a diverse range of crops and livestock that works with nature and supports rural communities.

Switching to more varied diets based on agricultural diversity will build increased resilience to future shocks and give farmers more additional income streams. Agrobiodiversity boosts agricultural productivity and ecosystems (including wild biodiversity) and enhances nutrition in diets (Bioversity International, 2017, 'Mainstreaming Agrobiodiversity in Sustainable Food Systems: Scientific Foundation for an Agrobiodiversity Index', Bioversity International, Rome, Italy).

Forgotten Crops (also known as underutilised or orphan crops) comprise the multitude of species that are currently neglected by major research, funding bodies and global food manufacturers/retailers. They include cereals, grains, legumes, seeds, nuts, fruits, vegetables and roots and interest is growing in their potential to contribute to food and nutritional security and more favourable livelihood options for the subsistence of farmers.

Edible plant, animal and fish biodiversity can support nutrition through the availability and consumption of a wide variety of nutrient-rich foods (Lutaladio N, Burlingame B, Crew J, 2010, 'Horticulture, biodiversity and nutrition', *Journal of Food Composition and Analysis* 23(6):481-185) and diversity has been recognised as a fundamental principle in several national and regional dietary guidelines, including the Mediterranean Diet Pyramid (Bach-Faig A et al, 2011, 'Mediterranean diet pyramid today. Science and cultural updates', *Public Health Nutrition*, 14(12A0:2274-84) and more recent Nordic and Brazilian guides.

However, we grow insufficient fruit and vegetables to meet current dietary guidelines whilst piling up large calorie surpluses from other foods.

Growing more fruit and vegetables to feed the world by 2050 would consume an additional 171 million hectares; offset by a huge reduction in the amount of land used to farm grain; a saving of 150 million hectares. Producing less fat, oil and sugar would save 135 hectares and a shift to healthier diets would save 51 million hectares for arable land which could be dedicated to biodiversity conservation. Horticulture and the meat-free sector will require more funding in order for them to compete fairly.

A future healthy food system must address protein diversity by moving away from the consumption of large amounts of industrially-produced meat and dairy to eating more beans and pulses in line with dietary guidance.

Protein

The protein sector is already diversifying.

The Canadian Government's recent decision to invest over 100 million dollars into plant-based protein industries and the 'East Beyond Global' investment fund is a model for radical, national fiscal policy shifts which are essential levers to support behavioural and systemic change (including new job creation) at the scale required to protect human and planetary health and sustainable development.

However, not all 'plant-based' proteins are necessarily healthier or more sustainable in the long term. There have been important innovations in cell-based agriculture; in particular, the imminent arrival of cellular based meats. They can be engineered to be healthy, are better for the planet and will enable people to continue eating meat; potentially superseding factory farms altogether.

Cellular meats will provide new opportunities for producers and make the UK less reliant on imports to feed crops which are subject to price volatility, currency fluctuation, environmental impact and trade deals. They may also provide new

sources of income to rural communities, reduce air and water pollution and gift the UK food industry an opportunity to develop in a new direction.

Meanwhile, fungi-derived 'mycoprotein' is a distinct, and (currently) under-represented category on the shelves or in dietary guidelines. However, innovation in this sector is on the rise globally, as are evidence bases for its health and environmental credentials. The World Economic Forum estimated that swapping beef for mycoprotein could reduce mortality risk to the same or greater extent as swapping beef for beans and pulses, with most of these benefits attributed to its high fibre content (WEF, 2019): <https://www.weforum.org/whitepapers/meat-the-future-series-alternative-proteins>

Research by Exeter University (Monteyne, A. J., Coelho, M. O., Porter, C., Abdelrahman, D. R., Jameson, T. S., Jackman, S. R., ... & Wall, B. T. (2020). Mycoprotein ingestion stimulates protein synthesis rates to a greater extent than milk protein in rested and exercised skeletal muscle of healthy young men: a randomized controlled trial. *The American Journal of Clinical Nutrition*) shows that the protein in mycoprotein is highly bioavailable to the body across the lifespan, and can build skeletal muscle at twice the rate of milk-derived whey protein: <https://www.dailymail.co.uk/health/article-7208785/Protein-fungi-used-Quorn-builds-muscle-twice-fast-whey.html>. Furthermore, a 2020 review of the published evidence concluded that the wider benefits of mycoprotein in terms of reducing dietary cholesterol levels, blood glucose levels and appetite, alongside the inherent efficiency of producing protein by fermentation, make this an appealing protein source to be included within healthy and sustainable diets and dietary recommendations to support metabolic health (Coelho, M. O., Monteyne, A. J., Dunlop, M. V., Harris, H. C., Morrison, D. J., Stephens, F. B., & Wall, B. T. (2020). Mycoprotein as a possible alternative source of dietary protein to support muscle and metabolic health. *Nutrition Reviews*, 78(6), 486-497).

The advantage of mycoprotein's accessibility and inclusivity is also important in comparison to cellular meat and novel plant-based proteins, as it is widely available in halal and kosher certified Quorn branded vegetarian and vegan products which are well known, affordable and easily implemented into any dietary style.

The meat-like texture which naturally forms during the growth of mycoprotein is important to support consumer dietary change, demonstrated by the success of the mycoprotein-based Greggs vegan sausage roll and vegan steak bake, <https://www.theguardian.com/business/2020/jan/02/greggs-launches-meatless-steak-bake-beef-up-vegan-range>, and vegan KFC burger. The need for additional processing steps required in creating convincing plant-based meat alternatives, which can reduce their nutritional quality and increase their energy intensity

during production, is unnecessary as the whole mycoprotein and its nutritional composition can be preserved due to its natural texture.

As this little-known protein category grows, its inclusion within dietary recommendations and in nutritional advice given by health professionals will enable more informed choices by consumers.

New business models

Covid-19 has forced companies to operate in new ways (virtual meetings, online training, working from home) and focus on the wellbeing of their employees as well as question the necessity of their products in a time of crisis.

The most agile businesses have been those that are tech-savvy with higher worker engagement and a strong sense of purpose behind their brand or product. To prepare for future climate health-related shocks to our food system the businesses which most readily adapt their models will have the resilience to survive – and thrive.

Business impact networks such as B-Corp (certifying companies based on social and environmental governance and impact) or the United Nations Global Compact (demanding that businesses report transparently across ten principles and act to further the Sustainable Development Goals) may be attractive to companies wanting to appear investable and increase their appeal to greenwashing-savvy generations who favour brands in alignment with their values.

Investment in the new ways of working in and within the business community is likely to shift food manufacturing across the value chain and the agricultural industry, even more rapidly towards plant-based and new food innovations which offer health and environmental co-benefits (with increasing scrutiny on greenwash).

Re-opened restaurants and foodservices operators may be considering menu changes and looking to shift customer dining choices.

However, in the interests of equity, there must also be complementary investment in funding and policy reforms and a cross-sector green recovery strategy with social mobility projects at its core.

New business models and green investment strategies will further impact supply chains as product manufacturers, retailers and foodservice outlets seek greater transparency around the ingredients in their food and menus and in the ways in which they were grown, processed and transported.

In January 2020, Quorn Foods announced that it was the first major brand in the UK to include carbon labelling on its packaging and website, despite this not being a legal requirement. Other brands adding certified carbon footprint labelling to food packaging include Swedish dairy-free Oatley and most recently, Unilever committed to labelling over 70,000 of its products by 2039 (Bloomberg, 14 June 2020, 'Unilever's New Climate Plan puts Carbon Labels on 70,000 Products'): <https://www.bloomberg.com/news/articles/2020-06-14/unilever-to-cut-emissions-to-zero-by-2039-adopt-carbon-labelling>

An industry gold standard labelling/recommended daily allowance style metric on the sustainability of a food item would enable shoppers (and retailers and foodservice operators) to track the impact of their baskets.

The mass drive to online shopping consequent on Covid-19 offers unique virtual environments to 'nudge' individuals towards these behaviours using such information.

However, the required collaboration between progressive food businesses, specialists in health and environmental modelling and regulatory bodies must happen quickly to take advantage of, and better communicate, progress and transparency within the private sector and build trust and knowledge amongst the general public.

Existing labelling standards which have key animal welfare considerations, such as the RSPCA Freedom Food Scheme, should also be subject to thorough scrutiny and review in light of the circumstances surrounding Covid-19 and should explicitly address planetary health, social justice and the ongoing climate crisis.

A new vision of healthcare

The NHS has arguably become the nation's 'biggest brand' during the Covid-19 pandemic, and a renewed appreciation of our health service must be best used to bolster interests in long-term health resilience and wellness behaviours, inclusive of dietary quality.

The Prime Minister's new acknowledgment (15 May 2020) of the Government's responsibility in addressing the UK's high rate of overweight and obesity through diet was widely welcomed - as are forthcoming legislative suggestions - but obesity is a complex disease.

Health inequalities, poverty, the food system and the obesogenic environment are factors that must be addressed in order to reduce obesity levels and improve

health outcomes. This is not a matter circumscribed by individual responsibility and must be addressed in a sustainable way with ongoing support and a conducive environment led by the Government.

The British Dietetic Association's (BDA) survey recorded attitudes to the nation's food habits in terms of the psychology of food. The findings suggest that the type of wide-scale collective thinking that will facilitate a new relationship between food and public health cannot be guaranteed:

<https://www.bda.uk.com>

Comments made seem to prioritise food as a comfort:

'I'm eating more chocolate.'

'More alcohol consumed than usual.'

'I feel I have put on about half a stone just by feeling sorry for myself and rewarding myself constantly with cakes and biscuits.'

It was the calorie-dense foods categorised in the 'Eat Less and Often and in Small Amounts' section of the Public Health England Eat Well Guide that provided this comfort:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/528193/Eatwell_guide_colour.pdf

The mentality harks back to outdated and unhelpful attitudes to foods and advertising slogans such as 'naughty but nice' as used for marketing cream cakes in the 1980s. This trait has also been evident in some of the branded food boxes on sale from some companies in response to the pandemic, who emphasise in their advertising/descriptive literature how 'we all need a treat too.'

Policies around advertising food should be shifted to help people to understand what is meant by 'eating well' in a holistic sense and campaigns focusing on 'guilt-free treats' or 'sin taxes' should adapt their language to suit this thinking.

The BDA survey does show that for some families, the pandemic offered a chance to reflect on their food and eating habits:

'We have enjoyed eating more as a family as the kids are at home for every meal. They have picked up some more cooking and food prep skills as have wanted to get involved in cooking and food prep.'

However, we should all be aware that post-pandemic, encouraging someone who is reliant on convenience foods to cook more will not be easy.

Government action

Arguments favouring governments taking a proactive approach to food policy have been countered by those militating against the 'nanny state'. However, creating a healthier food system will require the Government to take a lead and set the framework. The government is already involved in most aspects of food policy from trade to tax to subsidies to procurement to healthy eating guidelines: it is already a nanny. It should update its existing policies to ensure they are joined up and create a healthier food system and become a world leader.

A starting point would be a cross-governmental policy on food systems. A multi-level approach, 'from the national to the local', is an essential feature of the planning and reconstruction of agri-food systems for the future and would include support given to farming.

Farmers can be paid for ecological outcomes. Rather than subsidising production (whether wheat, sheep or sugar) government should consider how to best support demand for nutritious local fruit, vegetables, dairy and eggs, the skills to cook them and creating a market to which farmers, fishers and manufacturers can respond.

This in turn will enhance and diversify their incomes without the need for production support. A key outcome would be to reduce inequality and enhance household food security.

Public procurement should drive change and supply healthy food for schools, care homes and hospitals. Additional funds could be set aside to provide better, local foods. The Government should institute a National Household Food Insecurity Plan, covering adequate wages and social security benefits, through holiday hunger and enrichment programmes for children from disadvantaged backgrounds.

It would encompass a welfare payment made in addition to current credits; only available to spend on local products and left to the discretion of the individual as to whether the money is spent.

The Royal Society (Royal Society for the Encouragement of Arts, Manufactures and Commerce) has started to outline how this might work with its 'beetroot bond' (RSA Food, Farming and Countryside Commission 2019: 'Our Future in the Land'): <https://www.thersa.org/globalassets/reports/rsa-ffcc-our-future-in-the-land.pdf>

The Government must conduct a full review of the National Food Strategy to date, aligning it explicitly to the Sustainable Development Goals; meeting the challenge

to diversify our food, relocalise food chains and reconnect people to their food heritage by developing a National Food Plan.

Within the next 18 months, the UK has an opportunity to take a lead in demonstrating to the world how a sustainable, fair and healthy food system can be achieved via the forthcoming Global Nutrition Summit, the Convention on Biological Diversity and the Food Systems Summit; all of which will address aspects of food, farming and fishing.

The UK can show true global leadership at the Climate COP in Glasgow in 2021 by talking about food and climate action and showcasing a UK 'green pathway' to reboot the economy in a post-Covid world.

The European Union has pledged a 750 billion Euro green Covid recovery fund called 'Next Generation EU' (Forbes, 27 May 2020, 'EU Will Fight COVID Recession With Green Investment'):

<https://www.forbes.com/sites/davekeating/2020/05/27/eu-will-fight-covid-recession-with-green-investment/>

and Commission President, Ursula von Leyen has claimed a 'new generational pact for tomorrow,' promising that 'Europe's next generation will harvest the benefits.' However, NGO Friends of the Earth have critiqued the lack of conditions attached to the fund. Without such conditions, the money may be used to exploit loopholes and continue polluting activities and civil society oppression practices – under a guise of 'improving green technologies'.

The funds themselves are a welcome, but should a newly independent Britain choose to follow suit, it must show more considered leadership in ring-fencing some of these funding schemes for 'at risk' communities and highest impact projects which will truly enable human and humane recovery and resilience. Technologies will not solve all the problems; we must also invest in social ingenuity and togetherness to change values and behaviours; respecting cultural norms to achieve non-negotiable outcomes based on the best available science, rather than the most readily wielded power and money.

A post Covid-19 green, healthy recovery that can ensure that children will have a fit and healthy future could adopt as its loadstone, the prescription of the World Health Organisation:

1. Protect and preserve the source of human health: Nature
2. Invest in essential services, from water and sanitation to clean energy in healthcare facilities
3. Ensure a quick, healthy energy transition
4. Promote healthy, sustainable food systems

5. build healthy, liveable cities:

<https://www.who.int/news-room/feature-stories/detail/who-manifesto-for-a-healthy-recovery-from-covid-19>

To deliver a healthy future for the next generation, we must reduce inequality and poverty, secure access to healthy food for all, enhance nature and ensure that producers are able to provide what we need.

After all, food, farming and fishing are forces for change.

They should always be forces for good.

Recommendations:

- 3.1 Embed the Sustainable Development Goals through the lens of nutrition into cross-functional policy and practice, namely the food industry, the education sector and into primary health care; aligning them to achieve sustainable diets within a 2030 framework and tackle silos
- 3.2 The UK to commit to the aim of ending funding for, and the prevention of, further factory farming by 2040 at home and abroad, to reduce the likelihood of future pandemics and to remove cheap, low welfare, poor quality and environmentally destructive animal products from the supply chain and the plates of the most vulnerable
- 3.3 The UK to commit to a funding plan for the redistribution of funding streams to regenerative local farming including growing skills, improving access to nature for all and to improve the scale and quality of meat and dairy alternatives
- 3.4 Statutory overarching targets to provide longevity and clear direction for policy change such as halving household food insecurity by 2030 (to align with the Sustainable Development Goals) and halving childhood obesity by 2030
- 3.5 'A New Deal for Horticulture'; including a grant mechanism to drive up the number of market gardeners and fruit growers to meet local demand. Shorter supply chains should be encouraged to improve grower livelihoods and increase access to fresh and affordable fruit and vegetables. Fruit and vegetable producers should be eligible for special payments to support 'on farm' employment
- 3.6 A 'Citizen Agency' taking the opportunity to reconnect UK citizens with food whilst restoring traditions, cultures and a sense of place from birth onwards. Reconnecting citizens and reframing the language from 'consumers who demand, choose or buy food' to 'citizens who can participate in, create and shape food systems' is a desirable goal':
<https://www.foodethicscouncil.org/programme/food-citizenship/>

- 3.7 Collaboration between the food industry, dietetics, medical practitioners, dentists and the wider health and social care systems to ensure that consistent messages are delivered in an effective manner to achieve maximum health benefits for the population. Ensuring that healthy food choices are made and supporting the food industry to produce good quality fresh food produce will in turn have a positive impact on general health and oral health and long-term, reduce the burden of care needed which will more than likely be managing the fall-out from Covid-19 for quite some time to come.
- 3.8 Co-ordinate for future resilience via a Cross Government Committee to coordinate food policy actions and responses to the pandemic. Health issues should be factored into the Agriculture Bill
- 3.9 Establish a 'Right to Food Framework' including a legally binding universal right to food alongside a broader incorporation of socio-economic rights. Abolish a 'no recourse to public funds' condition in order to safeguard migrant communities from destitution:
https://www.sustainweb.org/publications/covid_19_right_to_food_nrpf
- 3.10 Address short, medium and long-term food insecurity via a National Plan; overseen and coordinated by a Minister for Food Security.