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COVID-19

Fears grow of nutritional crisis in lockdown UK

As the government pushes its obesity strategy to “beat coronavirus,” experts are concerned that the pandemic has tipped many more families into food poverty—with particular concerns for children’s physical and mental health. **Chris Baraniuk** reports

Chris Baraniuk *freelance journalist*

The UK has had a run on food banks. As lockdown descended, resulting in millions of workers being furloughed or put out of work, many families found themselves facing an unfamiliar plight: food insecurity, also called food poverty. That more people were struggling to feed themselves and their children is clear from food bank statistics for April: an 89% increase in food parcels distributed by Trussell Trust food banks, and a 175% increase at the Independent Food Aid Network, when compared with the same month in 2019.¹

Tracy Olin, at Pembrokeshire Action to Combat Hardship (PATCH), helps to run a food bank. She and her colleagues have been shocked at the rise in demand—and at how many people have returned for assistance week after week. “We’ve had so many ... that would only come to a food bank to donate [previously],” she says. “They really would never have dreamt that they would have to benefit from us.”

Concerns are now growing that the covid-19 pandemic has exacerbated nutritional problems associated with food insecurity. These include obesity, undernourishment, nutrient deficiencies, and mental health problems such as anxiety, low self-worth, and depression. There are few or no hard data to show this, say experts, because such conditions are rarely tracked at scale alongside data on nutrition. But there are signs that many families have experienced profound changes to their diets, which are known to be associated with effects on health.

Lockdown loss of nutrition

Data published on 29 July in the UK’s National Food Strategy review indicated that children ate more junk food and snacks but fewer fruits and vegetables during lockdown—and that this effect was heightened among poorer children.²

A preprint of a small study by researchers at Northumbria University, published in June,³ showed similar findings from surveys of 57 children aged 9 to 12 years. Their average intake of fruit, for example, fell from just over one portion a day to half a portion a day. The drop in daily vegetable consumption was even sharper, from just over two portions on average to a half portion. Before school closures 25% of children skipped at least one meal a day; “Following school closures, this percentage increased to 35% of children skipping one meal a day, with 10% skipping more than one meal per day,” the authors wrote.

This month, the government’s Food Standards Agency (FSA) revealed that the proportion of people accessing food banks had risen from 7% in May to 10% in June, and was 9% in July.⁴ Its study, based on monthly surveys of 2000 people, also suggested that millions were cutting down the size of meals or skipping them entirely.

Younger people have been hit hardest, with nearly a quarter (23%) reporting that they had used a food bank in July. Respondents with a physical or mental health condition were also more likely to have accessed food in this way (39% in July).

Covid-19 has “shone a light” on existing inequalities, argues Rachel Flowers, director of public health for Croydon. Food banks in her borough, too, have been very busy.

“The fact that there were so many people who had this experience demonstrated how vulnerable people were,” says Flowers. She argues that any response to the situation ought to tackle the inequality gap generally, as well as targeting specific issues such as obesity.

“Supposed to be a stopgap”

Maintaining a balanced diet when relying on food banks for sustenance is known to be difficult. Pembrokeshire’s Olin acknowledges this: while the food bank she manages includes fresh fruit and vegetables in food parcels whenever possible, she says that living on these supplies for an extended period is not desirable. “We do our best nutritionally,” she says, but adds, “We’re supposed to be a stopgap.”

A YouGov survey of 4000 households on behalf of the charity the Food Foundation found that food insecurity in households with children had nearly doubled since the start of the pandemic, not including food insecurity that was due solely to supply issues.⁵ “I was really shocked,” says Anna Taylor, the foundation’s executive director, pointing out that parents and guardians usually absorb a nutritional hit and continue providing meals for their children at the least.

“We were surprised about the extent to which parents were not able to do that,” she adds, noting that this was apparent in the data even though, understandably, parents often find it difficult to disclose such problems, even anonymously in surveys.

Because food has been scarce for many families, with some relying solely on food banks, it is possible that their children's nutritional status has deteriorated as a result of lockdown, says Taylor. This is concerning, she explains, because children grow very quickly and it's not always possible to redress even relatively short periods of compromised nutrition. For example, studies have found evidence that poorer children may end up being up to 1.6 cm shorter than those from affluent backgrounds.⁶

The health of adults and elderly people is also at risk from food insecurity, notes Rachel Loopstra, a lecturer in nutrition at King's College London. Older people are particularly vulnerable to weight loss in times of hardship, she says, and people of any age with a deficient energy intake may experience fatigue and a reduced ability to carry out their regular activities.

A companion report to the FSA survey, on the experiences of those living with food insecurity, found anecdotal evidence that many people with food intolerances had been unable to afford particular products, such as gluten-free ones, which had had a negative effect on their physical and emotional wellbeing.⁷

Beyond physical health

Mental health problems had worsened during lockdown, the report also suggested, with the lack of a balanced diet taking a mental as well as physical toll. "I feel depressed really; it's groundhog day," one woman told the researchers. "There is nothing to look forward to: the same different food every day ... just different bread, brown or white, or a bread roll."

Taylor also points out that nutritional deficiencies or feeling hungry can affect children's educational performance, already hampered by the closure of schools during lockdown. Their mental health may also be affected, and yet more problems can unfold from that.

"The stigma which they experience is profound. They don't want to tell their friends about it; they're embarrassed," says Taylor. "The fact that kids are often suffering in silence has knock-on effects on their behaviour and in turn their relationships as well."

A recent survey of 1000 social services, voluntary sector, and other professionals who are in regular contact with children and families found that the majority (84%) of participants had seen a rise in mental health issues associated with food insecurity during the pandemic.⁸ The charity Buttle UK, which carried out the survey, warns that this, combined with a lack of adequate internet access in many poorer households, has blighted the education of many children.

Families struggling to get enough food is a "genuine worry," says Max Davie, officer for health improvement at the Royal College of Paediatrics and Child Health and a consultant community paediatrician. He says that one of his main concerns is that the overall ability of a family to function as a cohesive unit can be negatively affected by food insecurity, because it places an additional burden on the family as a whole. This too is associated with mental health outcomes. "It all just plays in together," he says.

Opportunities to help

But there are opportunities to help people in need. In June, and after much resistance to the idea, Boris Johnson made a U turn on a policy not to extend free school meals to poor families in England over the summer. After a high profile public campaign led by the footballer Marcus Rashford,⁹ authorities are now offering vouchers to such families. Most parts of the UK make meals available through the provision of vouchers, which can be used at supermarkets, for example. Northern Ireland, however, makes cash payments directly

into parents' bank accounts.¹⁰ In other places, including Wales,¹¹ the type of help available differs depending on the local authority.

It is likely that this regional variation will have led to differences in how quickly families in need were able to access food, argues Loopstra.

Taylor adds that expanding the provision of free school meals to more families would be one way to further redress health issues and inequalities caused by the current situation. "I'm concerned that, as children return in September, a lot of schools are going to be asking children to bring in packed lunches," she says.

"We know that packed lunches are a disaster when it comes to nutrition."

Loopstra also suggests that subsidising the cost of healthy food such as fresh fruit and vegetables could complement recently announced government measures to reduce the consumption of fatty and sugary products.¹² The new measures include a ban on "buy one get one free" deals that include unhealthy foods.

Lack of data

There remains a striking lack of quantitative data on the health problems that have manifested for British families experiencing food insecurity during the pandemic.

"Other than data being collected potentially in hospitals, we don't really have access to anything like that over this period," says Loopstra, who also points out that hospital data are not likely to capture the full extent of the situation anyway. "We know that people have been avoiding hospitals at all costs," she points out.

As was previously the case with low rates of testing for covid-19, minimal surveillance of nutritional health in communities means that the breadth of the problem remains unknown. And, just like tackling a pandemic, it is difficult for public health authorities to formulate their response—or know where to direct it—until the nature of the situation becomes clearer.

This article has been amended to remove duplicated text on fruit and vegetable consumption.

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- Butler P. Record numbers used UK food banks in first month of lockdown. *Guardian*. 3 Jun 2020. <https://www.theguardian.com/society/2020/jun/03/record-numbers-used-uk-food-banks-in-first-month-of-lockdown>.
- National Food Strategy. Part 1. Jul 2020. <https://www.nationalfoodstrategy.org/wp-content/uploads/2020/07/NFS-Part-One-SP-CP.pdf>.
- Defeyter G, Mann E. The Free School Meal Voucher Scheme: What are children actually eating and drinking? Northumbria University. <https://healthylivinguk.org/wp-content/uploads/2020/06/Covid-19-Free-School-Meal-Vouchers-FINAL.pdf>.
- Food Standards Agency. Covid-19 consumer tracker waves 1-4. 2020. <https://www.food.gov.uk/sites/default/files/media/document/covid-19-wave-1-4-report-final-mc.pdf>.
- Food Foundation. The impact of coronavirus on food. May 2020. https://foodfoundation.org.uk/vulnerable_groups/food-foundation-polling-third-survey-five-weeks-into-lockdown.
- Neumann J. Small height differences among kids may reflect economic disparities. *Reuters*. Sep 2015. <https://www.reuters.com/article/us-health-children-height-poverty/small-height-differences-among-kids-may-reflect-economic-disparities-idUSKCNORR11720150927>.
- Bright Harbour, Food Standards Agency. The lived experience of food security under covid-19. 2020. <https://www.food.gov.uk/sites/default/files/media/document/fsa-food-insecurity-2020-report-v5.pdf>.
- Buttle UK. The state of child poverty 2020. Aug 2020. <https://www.buttleuk.org/news/the-state-of-child-poverty-2020>.
- Syal R, Stewart H, Pidd H. Johnson makes U-turn on free school meals after Rashford campaign. *Guardian*. Jun 2020. <https://www.theguardian.com/politics/2020/jun/16/boris-johnson-faces-tory-rebellion-over-marcus-rashfords-school-meals-call>.

- 10 Bain M. Free school meals in NI to be extended over summer. *Belfast Telegraph*. 20 Jun 2020. <https://www.belfasttelegraph.co.uk/news/health/coronavirus/free-school-meals-in-ni-to-be-extended-over-summer-39300426.html>.
- 11 Wightwick A. How councils are providing free school meals where you live. *Wales Online*. Apr 2020. <https://www.walesonline.co.uk/news/education/free-school-meals-council-coronavirus-18036157>.
- 12 Department of Health and Social Care. New obesity strategy unveiled as country urged to lose weight to beat coronavirus (COVID-19) and protect the NHS. Jul 2020. <https://www.gov.uk/government/news/new-obesity-strategy-unveiled-as-country-urged-to-lose-weight-to-beat-coronavirus-covid-19-and-protect-the-nhs>.

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