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**The Food Foundation, London School of Hygiene and Tropical Medicine and SHEFS Written
Submission to Select Committee on Food, Poverty, Health and the Environment:
One-page Summary**

In the following submission we present evidence on:

- The [prevalence of food insecurity](#) - even the most conservative estimates indicate that food insecurity affects a significant proportion of the UK population.
- [Affordability](#) of adequate nutritious food - for many in the population this is unachievable as demonstrated by our assessment of the cost of the Eatwell Guide relative to disposable income after housing.
- The [causes of food insecurity](#) - including housing costs, the benefits systems and the decreasing value of the 'nutritional safety net' such as Free School Meals and the Healthy Start Scheme
- The [effects of food insecurity on health](#) and the differences in prevalence of diet-related disease between the poorest and richest groups.
- Unpublished data from the SHEFS research consortium on dietary differences between the general population and the lowest income people and the [health](#) and [environmental](#) implications of conforming to dietary guidelines.
- [Accessibility](#) of food - factors other than price that impact people's ability to have a healthy diet.

We recommend that the Committee consider the following three [actions](#) which we believe will help to tackle the challenges outlined above:

1. Adopt legal targets and metrics
2. Invest in a 20-year fruit and vegetable campaign
3. Establish a Children's Food Watchdog



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Submission to Select Committee on Food, Poverty, Health and the Environment**

September 2019

About the Food Foundation

1. The Food Foundation is an independent think tank working to address challenges in the food system in the interests of the UK public. We provide clear analysis of the problems caused by the food system and the role of policy and practice in addressing these. We develop and articulate food policies that support and guide the UK public to make choices that improve their health and wellbeing and we inform and generate demand for new and better public and private sector policy and practice.

About LSHTM and SHEFS

2. SHEFS (Sustainable and Healthy Food Systems) is a global research programme funded by the Wellcome Trust whose primary purpose is to provide new, interdisciplinary research that policymakers can use to shape food systems that will deliver healthy, accessible, affordable and sustainable food for future populations. The project is a multi-partner research consortium led by the London School of Hygiene and Tropical Medicine (LSHTM).

Levels of Food Insecurity

3. Food insecurity prevalence is a measure of people's experiences of not being able to attain sufficient nutritious food. The UK government has recently begun measuring food insecurity as part of the Family Resources Survey, but the first data will not be available until 2021. Household food security will be measured using the USDA Food Security Measurement Tool which asks 10 questions about whether they have experienced being unable to acquire and eat enough food. These questions have been shown to be well understood and meaningful to respondents, resonating with household experiences of what it is like to not have secure access to food¹.
4. However, in the absence of this data, there are other sources that estimate food insecurity prevalence in the UK. From the available data even the most conservative estimates indicate that food insecurity affects a significant proportion of the UK population.
5. The *FSA Food and You Report*² (Wave 5 – data collected between June and November 2018), based on 2,241 interviews from a representative sample of adults across England, Wales and Northern Ireland, found 10% of participants reported low or very low food security (*Table 1*).

| Level of Food Security | Percentage of People (%) |
|--|--------------------------|
| High Food Security (Households had no problems or anxiety about consistently accessing adequate food.) | 80 |
| Marginal Food Security (Households had problems at times or anxiety about accessing adequate food but the quality, variety and quantity of intake were not substantially reduced.) | 10 |
| Low Food Security (Households reduced the quality, variety and desirability of their diets but the quantity of food intake and normal eating patterns were not substantially disrupted.) | 10 |
| Very Low Food Security (At times during the year, eating patterns of one or more household members were disrupted and food intake reduced because the household lacked money and other resources for food.) | |

Table 1: Levels of food security in the UK (Data from FSA Food and You Wave 5²).

- Although conducted in a small geographical area of the UK, The Survey of Londoners³ used a large sample size (6,601 adults) relative to some of the other estimates of food insecurity prevalence (Table 2). Approximately 17 per cent of parents in London have children living in low food security, equating to approximately 400,000 children.

| Level of Food Security | Percentage of people (%) | Number of people |
|--------------------------------|--------------------------|------------------|
| Very low food security | 8.5% | 600,000 |
| Low food security | 11.3% | 800,000 |
| High or marginal food security | 80.3% | 5,700,000 |

Table 2: Levels of Food security in London (Data from Survey for Londoners³).

- Using data from the Gallup World Poll (GWP) survey in 2014-15, UNICEF⁴ estimated that 9% of children under 15 in the UK live in households with moderate food insecurity, and an additional 10% live in severely food insecure households.
- Due to the lack of standardisation and comprehensive measurement of food insecurity it is difficult to definitively state the prevalence. However, it is clear that food insecurity rates are too high, and despite being the fifth richest economy in the world, the UK has some of the worst rates of food insecurity in Europe¹.

Food Banks

- The increase in use of food banks is indicative of just how many people are struggling with food insecurity in the UK. The Trussell Trust supplied 1.6 million emergency food parcels throughout the UK last year – a 19% increase on the previous year⁵. However, the data from the Trussell Trust do not capture people receiving food parcels from other agencies or those receiving other forms of emergency food aid. Many people do not access food banks for a variety of reasons including the stigma associated with them. Emergency food parcels do not necessarily meet dietary guidelines and so even those receiving them are likely not having a nutritionally complete diet.

Affordability of Food

10. Food affordability – the household cost of the diet relative to income – is an objective way of assessing if people theoretically have the financial ability to eat sufficiently. The cost of the Eatwell Guide (Public Health England’s guidance on a healthy, balanced diet for the general population) is £41.93 per week for an adult⁶. The Food Foundation compared the cost of following the Eatwell Guide to household expenditure data from the 2015-2016 Living Costs and Food Survey and to disposable income data from the 2015-2016 Family Resources Survey. It was found that the poorest decile of UK households would need to spend 74% of their after-housing disposable income on food to meet the cost of the Eatwell Guide compared to just 6% in the richest decile. Just over half of households (53%) are currently spending at least enough on food and non-alcoholic drink per week to meet the estimated Eatwell Guide cost based on their household composition. In practice this means approximately 14.4 million households are not able to spend enough to meet the Eatwell Guide recommended diet.

Causes of Food Insecurity

11. Household food insecurity is closely tied to adequacy of household income and demands on household financial resources; these include housing, fuel, and other essential expenses. A lack of savings is also associated with a risk of food insecurity⁷. Causes of food insecurity are multifactorial and interlinked including declines in income, increased housing costs and the benefits system.
12. Between 2005 and 2018, the household costs of low-income households rose an average of 2.6% per year, compared to 2.2% in higher income households⁸. Benefits were frozen in 2016/17 and families claiming Universal Credit will be more than £800 worse off as a result⁹. Trussell Trust research shows an average 52% increase in food bank use in areas where Universal Credit was in place for 12 months compared to 13% in areas with Universal Credit for 3 months or less¹⁰. One of the key reasons they identified for this was the minimum five week wait for the first payment after application as well as poor administration (including poor communication and receiving underpayment)¹⁰.
13. The value of the “nutritional safety net” has also decreased. School meals provide an important nutritional safety net for our nation’s children. Compared to having a packed lunch, children who eat school meals have a healthier diet overall¹¹. Free school meals (FSM) have also been shown to have significant impact on educational attainment, particularly among children from poorer families¹¹. The eligibility criteria for FSM for children in KS2 excludes 50% of children living in poverty in England and 58% of Secondary age children living in poverty¹².
14. Furthermore, the FSM allocation of £2.30 per day is frequently insufficient for children to consume enough nutritious food throughout the school day. The Children’s Future Food Inquiry¹², coordinated by the Food Foundation, found 23% of secondary school children surveyed who did not qualify for FSM had gone without lunch because they couldn’t afford it.¹² An APPG on Hunger report found that approximately 3 million children are at risk of food insecurity during the summer holidays¹³.
15. The Healthy Start Scheme is an important programme targeted at pregnant women and young children, providing those on a low income with vouchers that can be spent on milk, fruit and vegetables and formula but it is failing to have its intended impact. The total number of people eligible for Healthy Start has reduced 30% since 2011¹⁴ with less than half of children living in poverty meeting eligibility criteria¹², and among those who are eligible for the scheme, many have difficulty registering. Over a 4 week period earlier this year only 54% of people who were

eligible to apply were successfully registered¹⁵. For those who do manage to apply and have the application accepted, the value of the voucher has not been increased since 2009 and has thus failed to keep pace with inflation.

Effects of Food Insecurity

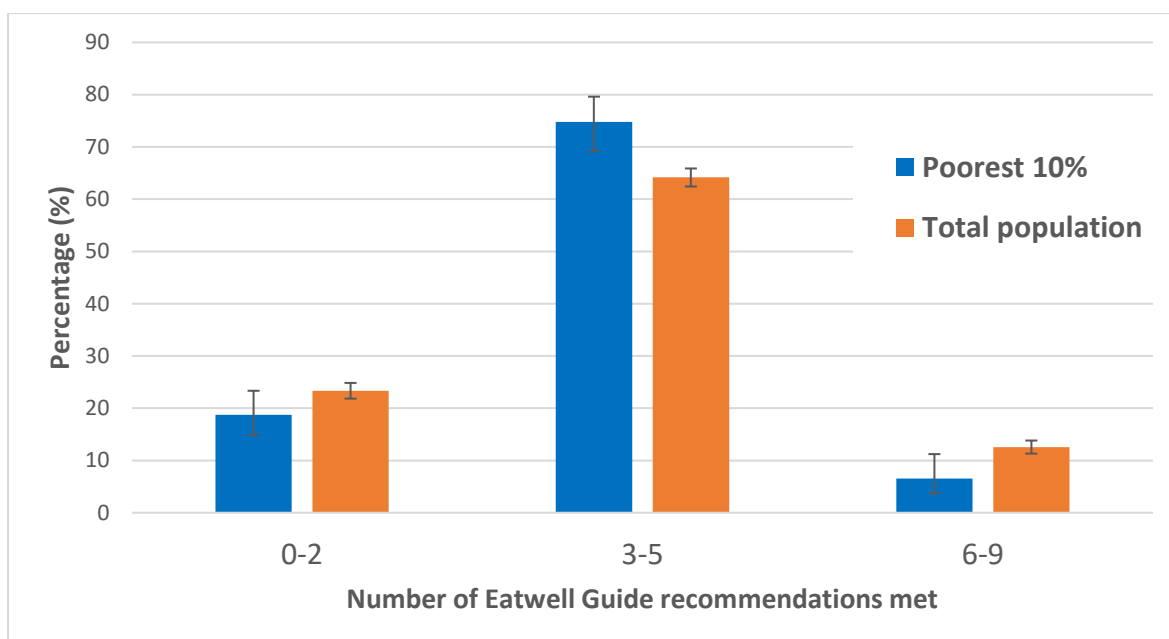
16. Malnutrition in all its forms (which includes undernutrition, overweight & obesity, and micronutrient deficiencies) and diet-related disease are highly prevalent in the UK - and the situation is known to be worse for those on a low income. 68% of adults are overweight or obese in the poorest quintile compared with 58% in the richest¹⁶ and people in the most deprived quintile are 40% more likely to suffer from type 2 diabetes than the least deprived¹⁷. Obesity and food insecurity often coexist due to reliance on cheap foods which are often energy-dense and lacking in nutrients.
17. Childhood obesity rates are twice as high among poorer children and children living in the most deprived areas are on average 1cm smaller than those in the least deprived areas¹⁸. Food insecurity not only damages physical health but also causes social harm bringing profound anxiety and stress to families and can affect children’s school attendance, achievement and attainment. It is associated with poor social well-being, poor quality of life and unhealthy lifestyles with food insecure children being more likely to report poorer health status and more likely to be hospitalised than food secure children¹⁹.

Diet Differences and Health

18. From the existing evidence, it is clear that rates of food insecurity in the UK are high, and this can have consequences in terms of dietary intake for both adults and children. Researchers at LSHTM, as part of the SHEFS project, have conducted research on the associations between income and adherence to dietary recommendations. These data help illustrate the complex relationship between income and diet, and provide further evidence that there is inequality when it comes to being able to have a healthy diet. This data is not yet published, but we are including the results in this submission as it is highly relevant to this committee.
19. Using data from the National Diet and Nutrition Survey (waves 5-9/years 2012-2017) for people aged 5 years and over, the researchers reviewed compliance with nine dietary recommendations (*Table 4*). Overall, the majority of the population is only meeting 3-5 of the nine dietary recommendations (*Graph 1*). Approximately half as many in the poorest decile were meeting 6-9 recommendations (considered to be reasonable compliance with the recommendations) compared with the richest decile (*Table 3*).

| | Poorest decile (% [95% CI]) | Richest decile (% [95% CI]) | Total population (% [95% CI]) |
|--|--------------------------------|--------------------------------|----------------------------------|
| People meeting 6-9 recommendations (i.e. reasonable compliance) | 6.5 [3.7-11.2] | 13.3 [9.3-18.6] | 12.5 [11.3-13.8] |

Table 3: Percentage of people with reasonable compliance with dietary recommendations across different income groups (Data from unpublished SHEFS research).



Graph 1: Percentage of people in the poorest decile and the total population meeting 1-2, 3-5 and 6-9 of the dietary recommendations (data from unpublished SHEFS research).

20. Those in the poorest decile were less likely to meet recommendations for fruit and vegetables, oily fish and other fish than the general population. There were only small differences seen for the recommendations for red and processed meat, fibre, free sugars, salt, saturated fat and total fat.

| Food Group | Dietary Recommendation | Poorest decile meeting recommendation (% [95% CI]) | Total population meeting recommendation (% [95% CI]) |
|------------------------|---|--|--|
| Fruit and vegetables | 400g per day minimum | 17.2 [12.3-23.6] | 26.0 [24.4-27.7] |
| Oily fish | 20g per day minimum | 8.8 [5.7-13.5] | 16.8 [15.5-18.2] |
| Other fish | 20g per day minimum | 19.8 [15.2-25.5] | 25.9 [24.4-27.5] |
| Red and processed meat | 70g per day maximum | 66.4 [59.9-72.4] | 64.2 [62.4-65.9] |
| Total fibre | 20-30g per day minimum depending on age | 8.3 [4.8-14.0] | 7.2 [6.3-8.3] |
| Total salt | 3-6g per day maximum depending on age | 76.8 [71.2-81.7] | 71.2 [69.6-72.8] |
| Free sugars | 19-30g per day maximum depending on age | 22.2 [17.4-28.0] | 24.2 [22.7-25.8] |
| Saturated fatty acids | 17-30g per day maximum depending on age and sex | 60.7 [54.4-66.7] | 52.3 [50.5-54.0] |
| Total fat | 54-97g per day maximum depending on age and sex | 83.8 [78.7-87.9] | 80.2 [78.7-81.5] |

Table 4: Percentage of people meeting the individual recommendation in the poorest decile and total population (data from unpublished SHEFS research).

21. Only 17% of the poorest decile were consuming sufficient fruit and vegetables compared with 26% in the general population. Increasing fruit and vegetable consumption is important for ensuring a healthy diet that meets micronutrient and fibre requirements²⁰, and a diet with more plant-based foods will generally have environmental co-benefits (see section on environmental sustainability below). Increasing consumption to meet dietary requirements for fruit and vegetable consumption would also create an opportunity for the horticultural industry to grow and to support local food chains to deliver healthy, sustainable fruit and vegetables to the population. Initiatives such as 5-a-day have had little impact on vegetable consumption as they focus on behaviour change when a variety of processes in the food system need to change to support consumers to be able to have healthier diets. The Food Foundation’s Peas Please initiative brings together farmers, retailers, fast food and restaurant chains, caterers, processors and government departments with a common goal of making it easier for everyone to eat vegetables. More support is needed from government policy to help make fruit and vegetables affordable and accessible to those living in food insecurity – for example, by expanding the eligibility criteria for the Healthy Start Programme and increasing the value of the voucher and ensuring that school meals provide good amounts of fruit and vegetables.

Diet Differences and the Environment

22. When families are struggling to eat enough food, let alone enough healthy food, prioritising environmentally sustainable food in household budgets is even more of a challenge. Further analysis from LSHTM matched the NDNS data to environmental impacts of different foods and found that the least healthy diets on average produce around 25% more greenhouse gas emissions than the healthiest, largely because they contain more meat and less fruit and vegetables (*Table 5*). The least healthy diets contain more than twice as much red and processed meat as the healthiest, and roughly half the amount of fruit and vegetables, and this has a big impact on the environmental footprint of the diet. When looked at by income quintile (*Table 6*), the richest quintile has a higher GHGE impact which is driven by the larger quantities of beef, fish and cheese in their diets.

| Number of recommendations met | Mean GHGEs (kgCO ₂ eq per kg [95% CI]) |
|-------------------------------|---|
| 0-2 recommendations | 5.41 [5.22-5.60] |
| 3-5 recommendations | 4.10 [4.01-4.20] |
| 6-9 recommendations | 4.00 [3.83-4.18] |

Table 5: GHGEs for average diet by recommendation compliance (data from unpublished SHEFS research).

| Quintile | Mean GHGEs (kgCO ₂ eq per kg [95% CI]) |
|------------------|---|
| Poorest quintile | 4.12 [3.92-4.33] |
| Q2 | 4.12 [3.94-4.29] |
| Q3 | 4.38 [4.20-4.57] |
| Q4 | 4.60 [4.40-4.79] |

| | |
|------------------|------------------|
| Richest quintile | 5.06 [4.84-5.27] |
| All | 4.40 [4.31-4.48] |

Table 6: GHGEs for average diets by quintile (data from unpublished SHEFs research).

23. However, while there are correlations between healthy and sustainable diets, they are not mutually guaranteed²¹. While encouraging consumption of plant-based rather than animal product-based diets could improve health and reduce greenhouse gas emissions from food, current UK diets are also using a lot of water in their production, and the healthiest diets actually use more water than the least healthy. Diets with the highest water use tend to contain more fruit and vegetables, vegetable oils and pulses, and this is often because we are consuming varieties that are produced in hotter and drier countries rather than domestically grown types (e.g. bananas from Costa Rica rather than seasonal apples from the UK.) The analysis by LSHTM shows that more than three quarters of the UK's greenhouse gas emissions from food are domestically generated. However, nearly 90% of the ground and surface water that goes into our food production comes from other countries. Some of these countries will be increasingly vulnerable to the effects of climate change, and therefore making more sustainable food choices in future will be vital for the UK's food security.
24. While all sustainable and health dietary guidelines agree that shift towards more plant-based foods, such as fruits and vegetables, would be favourable for both health and the environment, the impact on health and the environment will vary depending on which foods are consumed. If people are consuming more pineapples from Latin America rather than vegetables from Dorset, this will impact the environmental impact of a switch towards plant-based foods. To achieve health and environmental impacts, the Government should support the horticulture industry to increase demand and supply for local British produce, especially vegetables.
25. Furthermore, currently 32% of all fruit and vegetables (fresh and processed) available for consumption in the UK are produced in moderately to extremely climate vulnerable countries (NDGAIN vulnerability score 1-4)²². This proportion has been steadily increasing over the past decades. More than 80% of the UK supply of increasingly popular crops such as pineapples, papayas, apricots, dates, mangos, figs, bananas, and chilies are produced in climate vulnerable countries.
26. In theory, it should be possible to achieve a 57% reduction in GHGEs from diets in a way that also meets dietary guidelines and is affordable for all income groups²³. However, the responsibility currently falls on the consumer to choose sustainable foods and this is often more expensive and out of reach for those on a low income. For example, locally sourced and sustainably produced foods are often much more expensive than less sustainable alternatives. Retailers, caterers and restaurants are in a unique position to influence making healthy and sustainable food available for everyone, for example by reducing the meat content of packaged meals or having more seasonal menus²⁴. Government could lead by example by only sourcing healthy and sustainable foods for public procurement and using the Eatwell Guide as the standard for all meals in public places.

How Accessible is Healthy Food

27. Price is not the only factor affecting people having a healthy diet, and there are other factors that those on low incomes are more vulnerable to. Some people do not have access to

adequate food storage and cooking facilities and do not have the time or skills to prepare a healthy meal. This can lead people to buy highly processed foods which are often high in fat, salt and sugar. Previous research by the Food Foundation in our Force Fed report²⁵ found that 37% of adults dietary energy comes from HFSS foods and 58% from ultra-processed foods. Children's diets were found to be even worse with 47% of primary school children's dietary energy from HFSS and 64% from ultra-processed foods.

28. For those on a low income, priorities are centred around getting enough food, not nutritionally adequate food. Unhealthy foods are much more frequently on offer or promotion making them more appealing to people on a tight budget¹⁸. When money is limited, priorities are centred around purchasing food that will be filling rather than nutritional¹⁸. Families will be more likely to purchase foods that they know their children will eat, that are convenient and where there will be minimal food waste.
29. In order to facilitate people who are food insecure to have healthy diets and meet dietary recommendations we need to make considerable changes to make healthy food more accessible as well as more affordable. Changes in policy are required to ensure everyone has sufficient food and a healthy diet is affordable for everyone.

Policy Recommendations

30. We recommend that the Committee consider the following three actions which we believe will help to tackle the challenges outlined above:
 1. [Adopt legal targets and metrics](#)
 2. [Invest in a 20-year fruit and vegetable campaign](#)
 3. [Establish a Children's Food Watchdog](#)

Adopt legal targets and metrics

31. Currently there is no agreed vision for how our food system needs to change and no mechanism for judging whether we are going in the right direction. Part of this problem is that there is also no mechanism which enshrines in law the principle that everyone in Britain should have access to a healthy diet. We recommend that the Committee calls for a legal mechanism which would give the government's dietary guidelines and the cost of eating healthily (updated annually) a legal status and which would require other areas of legislation and government programmes to take them into account – i.e. legislation on benefits, minimum wage, school meal provision, care home provision, hospital food etc. This same legislation should set a number of metrics and targets which government and businesses operating in the food system should report on to parliament on a periodic basis. These could include levels of childhood obesity, levels of household food insecurity, greenhouse gas emissions associated with our diets etc. Business metrics could include those recently proposed in [Plating Up Progress](#). Some of these should have associated targets – for example halving household food insecurity by 2030 (to align with the SDGs). The process of reporting would help to drive cross government action in a multitude of areas.

Invest in a 20-year fruit and vegetable campaign

32. Eating fruit and vegetables brings benefits to health and the environment and is the area of the diet where we have the largest inequalities. This fruit and vegetable campaign should have multiple elements including:

- a) Establishing a vision for a UK produced seasonal fruit and veg basket which inspires people to try new varieties at different times of the year.
- b) Ensures all publicly procured food is oriented around provision of this fruit and veg basket and includes two portions of veg as standard in every main meal.
- c) Align farming subsidies to support farmers to grow this basket of products – this will include support for new entrants and smaller and younger growers, R&D support on agroecological growing methods, stronger farmer extension support, support for cooperatives etc.
- d) Invest in fruit and vegetable advertising to drive aspiration and to normalise consumption. This could build on the work of Veg Power.
- e) Invest in a nationwide early years programme for teaching children to develop healthy taste preferences and a lifelong preference for fruit and vegetables. This could build on Finland’s experience and the nascent work of Flavour School in the UK.
- f) Set and monitor mandatory reformulation targets for ready meals and takeaway meals for levels of vegetables.
- g) Develop a scheme with wholesalers aimed at increasing the fruit and veg offer in convenience stores in areas of high deprivation.
- h) Expand the entitlement to and value of Healthy Start vouchers to ensure all those living in poverty have access to fruit and veg vouchers, and work with retailers to add further value to this scheme.
- i) Give powers to local authorities to discount business rates for businesses which offer the fruit and veg basket.

Establish a Children’s Food Watchdog

33. The [Children’s Future Food Inquiry](#) showed that children’s food policy is not protecting children from food insecurity and its devastating consequences. It showed a number of implementation failures of existing policy, showed how existing policy is not reaching many children who need it and showed critical policy gaps (such as holiday provision for children entitled to free school meals). It also showed considerable differences in provision between the four UK nations on issues of basic entitlement. We therefore recommend that a statutory Children’s Food Watchdog is established to specifically ensure existing policies are implemented well and to ensure that policy gaps are addressed. It should report to Ministers in Health and Education Departments as well as to Parliament.

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