

Protecting and improving the nation's health

# Food Insecurity: The current situation 11 March 2021

Kristin Bash FFPH Public Health Consultant in Health & Wellbeing PHE Yorkshire & the Humber, Health & Wellbeing Team

# What will be covered here:

- 1. Food insecurity quick review of definitions
- 2. Food insecurity in the UK what do we know?
- 3. What impact has Covid had?
- 4. Start thinking about data and information what do we need?



### Food insecurity, Health Inequalities, Covid-19: Key Messages from previous webinars

Sustained periods of food insecurity have a negative health and wellbeing impact across the life course.

Food insecurity is unequally distributed throughout the population and contributes to the pervasive pattern of health inequalities in our society.

The Covid-19 outbreak is increasing the risk of food insecurity and the inequalities that go along with it.

Addressing food insecurity is a public health priority.





### Hot Springs Conference 1943 – 44

Governments met in Hot Springs, Virginia USA to consider goal of freedom from want regarding food & agriculture.

**"Freedom from want"** - a secure, adequate and suitable supply of food for every man, woman and child

- "secure" accessibility of the food
- "adequate" quantitative sufficiency of the food supply
- "suitable" nutrient content of the food supply.

# Food Security vs. Nutrition Security

#### Food Security FAO World Food Summit 1996

"Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life".

#### **Nutrition Security**

#### FAO/AGN, March 2012

"Nutrition security exists when all people at all times consume food of sufficient quantity and quality in terms of variety, diversity, nutrient content and safety to meet their dietary needs and food preferences for an active and healthy life, coupled with a sanitary environment, adequate health, education and care."

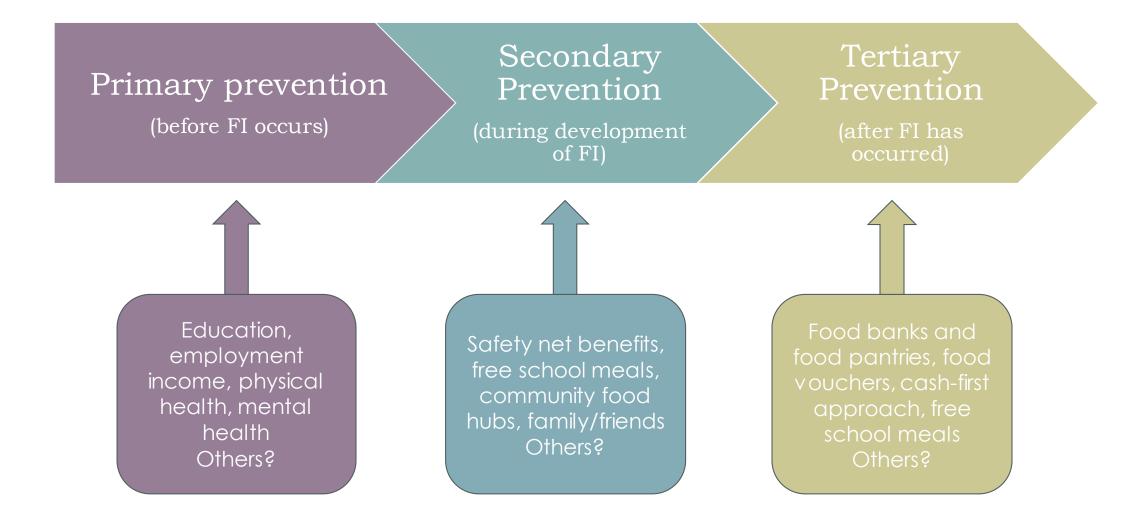


- **High food security:** no reported indications of food-access problems or limitations.
- Marginal food security: one or two reported indications—typically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake.
- Low food security (previously Food insecurity without hunger): reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake.
- Very low food security (*previously Food insecurity with hunger*): Reports of multiple indications of disrupted eating patterns and reduced food intake.

USA DEFINITION OF FOOD SECURITY (USDA)



### Public health approach to food insecurity: What are we trying to do?



### **Public Health Impacts of Food Insecurity**

<u>Children and Young People</u> – Increased risk of behavioural, academic and emotional problems; increased aggression and anxiety levels; increased suicidal ideation; a transient impact on toddler development (associated with parental food insecurity); and weight gain in childhood (American Academy of Pediatrics 2015; Gunderson and Ziliak 2015; Hernandez and Jacknowitz 2009; Jyoti et al. 2015; Shankar et al 2017)

<u>Working-age adults</u> – Increased risk for a range of chronic diseases, including diabetes, hypertension, hyperlipidaemia, NFALD, CVD, obesity levels; poor sleep outcomes; depression. (Petrovic et al 2018; Golovaty et al 2020; Gunderson and Ziliak 2015; Wang et al. 2015; Yau et al. 2020)

<u>Older adults</u> – Limitations to activities involved in daily living; depression and anxiety (Gunderson and Ziliak 2015)

<u>Whole population</u> – Increased risk of social and mental health; increased health care costs in infancy and adulthood (de Cuba et al. 2018; Dowler et al. 2011; Tarasuk et al. 2015)







# What is the current situation?

Department for Work & Pensions	Family Resources Survey 2018/19			ATTO APP
Annual F	inancial year 2018/19	Published: 26 March 2020	Coverage: United Kingdom	
The Family Resources Survey (FRS) is a continuous household survey which collects information on a representative sample of private households in the United Kingdom. Detailed information is recorded on each respondent: their incomes, from all sources including self-employment; housing tenure; caring needs and responsibilities; disability; expenditure on housing; education; pension participation; childcare; family circumstances; child maintenance. This report summarises the key findings from the FRS for the 2018/19 financial year, when over 19,000 households were interviewed.				

#### Next release

The next Family Resources Survey report will, for the first time, include estimates of household food security (unaffordability).

The next report will be published on 25 March 2021.







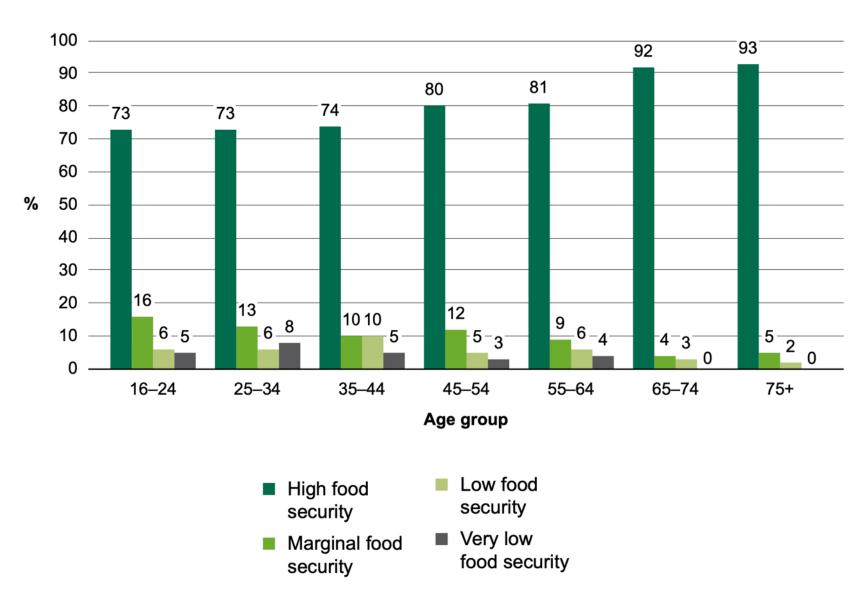
# Food & You Survey

- England, Wales & Northern Ireland
- In Food and You, household food security is measured using responses to ten different questions relating to experiences with accessing and consuming food.
- The 'Food Security' module was based on the 10item 'US Household Food Security Survey Module'.
- Respondents are allocated a score based on these responses. Households that report three or more conditions indicating food insecurity are classified as 'food insecure'.

https://www.food.gov.uk/sites/default/files/media/document/food-and-youwave5-combined-report-web-version\_1.pdf



#### Figure 1.8. Food security status by age group (Wave 5)



## Food & You Survey Data – 2018

 80% of respondents lived in households with high food security

 10% in households classified as marginally food secure

 10% reported living in household with low or very low food security.

#### **Factors affecting difference:**

- Age
- Households with children
- Working status
- Household income

https://www.food.gov.uk/sites/default/files/med ia/document/food-and-you-wave5-combinedreport-web-version\_1.pdf

### FOOD & YOU SURVEY QUESTION: HAVE YOU BEEN WORRIED ABOUT RUNNING OUT OF FOOD BEFORE THERE WAS MONEY TO BUY MORE?

#### 17% had worried about this at some time

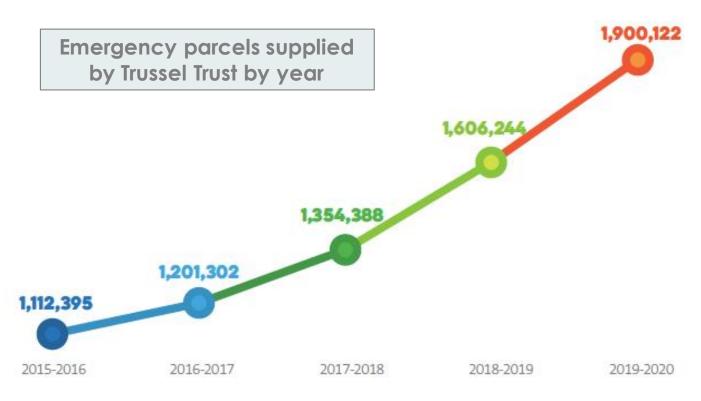
**Age**: 25% of age 16 and 24 – only 5% of over 75s

**Households with children**: 29% respondents living with a child under the age of 6 - only 15% for respondents not living with a child under the age of 6

**Household income**: 36% in lowest income households - declined with increasing income to 5% of the highest income households.



# Food bank recipients – pre-Covid-19



https://www.trusselltrust.org/wp-content/uploads/sites/2/2020/09/the-impact-of-covid-19-on-food-banks-report.pdf

- Children are disproportionate recipients of charity food (Garrett 2017).
- Foodbank usage rose alongside cuts to social security benefit (Loopstra et al., 2015).
- Individuals and households impacted by recent welfare reforms are more likely to receive food bank parcels (MacLeod et al. 2019).
- In-work poverty, disability, and unemployment rates all associated with foodbank use (Loopstra et al. 2019).
- A majority of food insecure households do not use foodbanks (MacLeod et al. 2019) – in part due to embarrassment (Purdam et al., 2016), or a reluctance to accept charity (Purdam et al., 2019).



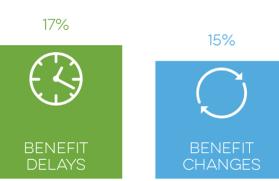


39%

LOW

INCOME

PRIMARY REASONS FOR REFERRAL TO TRUSSELL TRUST FOOD BANKS IN 2019-20



# Foodbank Data

### **Trussell Trust**

- Operate over 1,200 foodbank centres across the UK
- In 5 years ending 31 March 2020 foodbank use in their network increased by 74%
- A 19% year-on-year increase
- Main reasons for referral between April 2018 March 2019:
  - 33.1% due to low income 80% for people receiving benefits
  - 20.3% due to delays in benefits being paid
  - 17.3% due to changes in benefits



### State of Hunger Report Trussell Trust 2019



#### People referred to food banks:

- Average income approximately 11% of national median household income. Poverty threshold is 60% of median income.
- 23% were homeless; 9% were in emergency accommodation, 7% in temporary accommodation, 5% staying at a family or friends' house and 2% were rough sleeping.
- Those with housing costs many had costs close to total income within previous month.
- Areas of high housing pressure had substantially more takeup of food parcels

**Health issues** – **nearly 75%** reported health issues affecting someone in the household

- More than half reported mental health condition
- A quarter were affected by a long-term physical condition or illness
- 1 in 6 in six reported a physical disability.
- 10% had a learning disability





#### LOCKDOWN, LIFELINES AND THE LONG HAUL AHEAD:

The impact of Covid-19 on food banks in the Trussell Trust network

#### the trussell trust Site UC likeger

# Covid-19 Effect

Many more individuals and households have become reliant on food banks and wider community support.

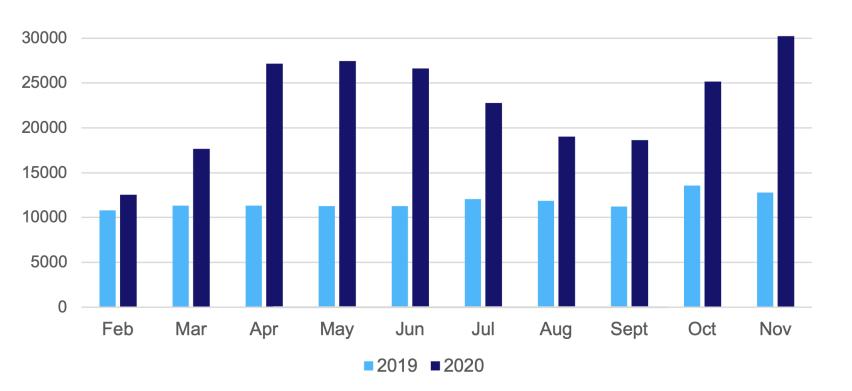
#### The Trussell Trust

- 81% increase in emergency food parcels during the last two weeks of March 2020 compared to the same period in 2019
- 122% rise in parcels for children
- Increased levels continued in Q2.



Number of people supported by 83 independent food banks in the UK February to November 2019 & February to November 2020

3



### IFAN – Independent Food Aid Network

Number of People supported:

 Nov 2019 to Nov 2020 136% increase

**Nov to Feb 2020 –** 141% increase



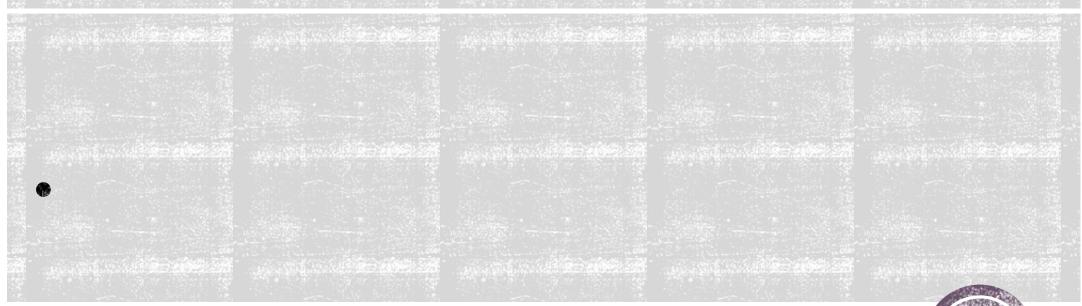
What do we actually measure?

How do we measure it?

How do we use this information?

If we had a magic wand....





#### **Kristin Bash**

kristin.bash@phe.gov.uk

@kristinbash



#### NEW REFERENCES

https://www.smf.co.uk/wp-content/uploads/2020/12/Measuringmitigating-child-hunger-Dec-20.pdf



# **Selected References**

Augusto, A. L. P., de Abreu Rodrigues, A. V., Domingos, T. B., & Salles-Costa, R. (2020). Household food insecurity associated with gestacional and neonatal outcomes: a systematic review. BMC Pregnancy Childbirth, 20(1), 229. doi:10.1186/s12884-020-02917-9

de Oliveira, K. H. D., de Almeida, G. M., Gubert, M. B., Moura, A. S., Spaniol, A. M., Hernandez, D. C., . . . Buccini, G. (2020). Household food insecurity and early childhood development: Systematic review and meta-analysis. Matern Child Nutr, 16(3), e12967. doi:10.1111/mcn.12967

Dietz W, Santos-Burgoa C. Obesity and its Implications for COVID-19 Mortality. Obesity Reviews 2020; 28(6).

Dowler E, Kneafsey M, Lambie H, Inman A, Collier R. Thinking about 'food security': engaging with UK consumers. *Critical Public Health* 2011; **21**(4): 403-16.

FAO 2020. Food Security and Nutrition Around the World in 2020: Executive Summary. FAO/IFAD/UNICEF/WHO Available at http://www.fao.org/3/ca9692en/online/ca9692en.html#chapter-executive\_summary

Food Foundation (2018) Affordability of the UK's Eatwell Guide. (September 2018) https://foodfoundation.org.uk/wp-content/uploads/2018/09/Affordability-of-the-Eatwell-Guide\_Final\_Web-Version.pdf)

Food Foundation (2020) The impact of Coronavirus on food: How have things changed since the start of lockdown? - online survey of 4352 adults in the UK conducted on 14th-17th May by YouGov Plc - https://foodfoundation.org.uk/new-food-foundation-data-food-insecurity-and-debt-are-the-new-reality-under-lockdown/. London: Food Foundation, 2020.

Frier, A., Barnett, F., & Devine, S. (2017). The relationship between social determinants of health, and rehabilitation of neurological conditions: a systematic literature review. Disabil Rehabil, 39(10), 941-948. doi:10.3109/09638288.2016.1172672

Golovaty, I., Tien, P. C., Price, J. C., Sheira, L., Seligman, H., & Weiser, S. D. (2020). Food Insecurity May Be an Independent Risk Factor Associated with Nonalcoholic Fatty Liver Disease among Low-Income Adults in the United States. J Nutr, 150(1), 91-98. doi:10.1093/jn/nxz212Gundersen, C. and Ziliak, J., 2015. Food Insecurity And Health Outcomes. Health Affairs, 34(11), pp.1830-1839.

Hanson, K. L., & Connor, L. M. (2014). Food insecurity and dietary quality in US adults and children: a systematic review. Am J Clin Nutr, 100(2), 684-692. doi:10.3945/ajcn.114.084525

HOL. (2020). Hungry for change: fixing the failures in food. London: House of Lords. Select Committee on Food, Poverty, Health and the Environment. Report of Session 2019 - 20. Kamphuis, C. B., Giskes, K., de Bruijn, G., Wendel-Vos, W., Brug, J., & van Lenthe, F. (2006). Environmental determinants of fruit and vegetable consumption among adults- a systematic review.pdf. British Journal of Nutrition, 96, 620-635. doi:10.1079/BJN20061896

Loopstra, R., Lambie-Mumford, H., & Fledderjohann, J. (2019). Food bank operational characteristics and rates of food bank use across Britain. BMC Public Health, 19(1), 561. doi:10.1186/s12889-019-6951-6

Loopstra R. Vulnerability to food insecurity since the COVID-19 lockdown: A preliminary report - Available from: https://foodfoundation.org.uk/wp-content/uploads/2020/04/Report\_COVID19FoodInsecurity-final.pdf. London: Enuf, King's College London & The Food Foundation, 2020;

Moradi, S., Mirzababaei, A., Dadfarma, A., Rezaei, S., Mohammadi, H., Jannat, B., & Mirzaei, K. (2019). Food insecurity and adult weight abnormality risk: a systematic review and meta-analysis. Eur J Nutr, 58(1), 45-61. doi:10.1007/s00394-018-1819-6

Moradi, S., Mirzababaei, A., Mohammadi, H., Moosavian, S. P., Arab, A., Jannat, B., & Mirzaei, K. (2019). Food insecurity and the risk of undernutrition complications among children and adole scents: A systematic review and meta-analysis. Nutrition, 62, 52-60. doi:10.1016/j.nut.2018.11.029

Mozaffarian, D., Angell, S., Lang, T. and Rivera, J. (2018). Role of government policy in nutrition—barriers to and opportunities for healthier eating. *BMJ*, p.k2426.

Muniyappa R, Gubbi S. COVID-19 pandemic, coronaviruses, and diabetes mellitus. American Journal of Physiology-Endocrinology and Metabolism 2020; 318(5): E736-E41.

Petrovic D, de Mestral C, Bochud M, et al. The Contribution of Health Behaviors to Socioeconomic Inequalities in Health: A Systematic Review. *Preventive Medicine Reports* 2018; **113**: 15-31.

Pourmotabbed, A., Moradi, S., Babaei, A., Ghavami, A., Mohammadi, H., Jalili, C., . . . Miraghajani, M. (2020). Food insecurity and mental health: a systematic review and meta-analysis. Public Health Nutr, 23(10), 1778-1790. doi:10.1017/S136898001900435X

Price, J., Zickgraf, H. and Rigby, A., 2019. Food insecurity in a pre-bariatric surgery sample: prevalence, demographics and food shopping behaviour. Public Health Nutrition, 22(15), pp.2756-2765.

Purdam, K., Esmail, A., & Garratt, E. (2019). Food insecurity amongst older people in the UK. British Food Journal, 121(3), 658-674. doi:10.1108/BFJ-05-2018-0301

Shankar P, Chung R, Frank DA. Association of Food Insecurity With Children's Behavioral, Emotional, and Academic Outcomes: A Systematic Review. *Journal of Developmental and Behaviorual Pediatrics* 2017; **38**(2): 135-50.

Simmet, A., Depa, J., Tinnemann, P., & Stroebele-Benschop, N. (2017). The Dietary Quality of Food Pantry Users: A Systematic Review of Existing Literature. J Acad Nutr Diet, 117(4), 563-576. doi:10.1016/j.jand.2016.08.014

Singer, A. W., Weiser, S. D., & McCoy, S. I. (2015). Does Food Insecurity Undermine Adherence to Antiretroviral Therapy? A Systematic Review. AIDS Behav, 19(8), 1510-1526. doi:10.1007/s10461-014-0873-1

Trussell Trust. Food banks report record spike in need as coalition of anti-poverty charities call for strong lifeline to be thrown to anyone who needs it - https://www.trusselltrust.org/2020/05/01/coalition-call/. Salisbury: The Trussell Trust, 2020;

Yau, A., White, M., Hammond, D., White, C., & Adams, J. (2020). Socio-demographic characteristics, diet and health among food insecure UK adults: cross-sectional analysis of the International Food Policy Study. *Public Health Nutr*, 1-13. doi:10.1017/

Wu, X. Y., Zhuang, L. H., Li, W., Guo, H. W., Zhang, J. H., Zhao, Y. K., . . . Veugelers, P. J. (2019). The influence of diet quality and dietary behavior on health-related quality of life in the general population of children and adolescents: a systematic review and meta-analysis. Qual Life Res, 28(8), 1989-2015. doi:10.1007/s11136-019-02162-4

