

Combined Member-led symposia (two joined up) – listed as day 1 11.45-1300

Submitted by: Professor Alexandra Johnstone, Personal Chair, Rowett Institute, University of Aberdeen and Dr Nicola Heslehurst, Senior Lecturer in Maternal Nutrition, Newcastle University

Title: The food insecurity and obesity paradox

Food insecurity exists when the availability of nutritionally adequate and safe foods, or the ability to acquire acceptable foods in socially acceptable ways, is limited or uncertain. Food insecurity is a well-established driver of obesity in high-income countries, labelled a paradox due to assumptions that hunger=weight loss. This symposium brings together food insecurity researchers investigating: 1. sustainable and healthier food choices in the retail FOOD environment, and 2. evidence relating to food insecurity in pregnancy - a highly vulnerable population. It includes a series of presentations followed by a panel discussion with all speakers.

Session 1 context: The FIO Food project aims to improve environmentally sustainable and healthier food choices in the UK food system and to provide actionable evidence for policy on retail strategies to address dietary inequalities in people living with obesity and food insecurity. At both UK and global levels, we need to change dietary patterns to address environmental, health, and inequality challenges. Despite considerable policy intervention, the prevalence of people living with overweight, and obesity has continued to rise in the UK, with obesity now a leading cause of death. The number of individuals living with obesity is higher in areas of social deprivation and the current UK food system, including governmental policy, does not effectively address this; indeed, current behavioural approaches may even widen the inequalities gap. The National Food Strategy team have extensively reviewed the UK food system with the remit for planning access “*safe, healthy, affordable food; regardless of where they live or how much they earn*”. In the detailed report, the key issues of obesity, reducing diet-related inequality and the environmental impact of the food system are described and discussed. The links between food insecurity and the development of obesity and the potential effectiveness of interventions to prevent and reduce the impact of diet-induced health harms is not well evidenced in the UK retail food environment.

Session 2 context: The current UK context is one of both increasing food insecurity and inequalities in obesity prevalence. Drivers of food insecurity include poverty, unemployment and low-income, which have increased since the 2008 global financial crises, and more recently food and fuel costs have increased due to Covid-19, the invasion of Ukraine, and cost-of-living crisis. These drivers influence interactions with obesogenic environments, impacting the most vulnerable in our society, with an increasing reliance on voluntary systems such as food banks for support. The Food Foundation reported inequalities in those most affected by food insecurity, with concerning implications for life course inequalities in exposure to obesity determinants. For example, there is higher prevalence in households with babies and young children (27.3%) than households with school aged children (23%) or no children (15.4%); a concerning trend for early life exposures. Women are most likely to sacrifice their food for other members of their household; a concerning issue for preconception and pregnancy exposures.

Co-Chair: Dr Adrian Brown, University College London, Welcome and Introduction to the paradox of food insecurity and obesity (5mins)

PPIE Co-Chair: Sarah Le Brocq

All speakers have 10mins presentation slot

Session 1 Food insecurity and obesity and food purchase behaviours (FIO Food Project)

Prof. Flora Douglas/ Dr Emma Hunter, Robert Gordon University

Understanding lived experiences of navigating supermarket foodscapes when living on a low income

Prof Charlotte Hardman/Dr Rebecca Stone, University of Liverpool

Understanding the association between food insecurity and healthy and sustainable food purchasing in people living with obesity: results from a cross-sectional survey

Session 2 Food insecurity and obesity in pregnancy: a driver of inter-generational inequalities in obesity prevalence?

Dr Gina Nguyen, Newcastle University

Meta-analysis of associations between food insecurity, maternal obesity, gestational weight gain, and maternal and infant pregnancy health outcomes in high-income countries

Dr Zoë Bell, King's College London

Underlying mechanisms of food insecurity in pregnancy and the impact on maternal weight, fetal development and childhood obesity: from social to biological

Ms Julia Zinga Newcastle University

Thematic synthesis of pregnant women's experiences of food insecurity in high-income countries

Panel Q&A and audience discussion (20min)