establishments and incidence of the relevant health conditions such as childhood obesity.

Results Our preliminary results show the planning guidance significantly reduced the proportion of takeaways compared to all other types of food outlets (p-value: 0.000). However, there was no statistically significant reduction in takeaways.

Conclusion This study provides preliminary evidence on the effectiveness of policy to manage the food environment. Our next step will be to explore how changes to the food environment impact on health outcomes and inequalities.

P21 TASTE CLASSIFICATION OF FOODS CONSUMED IN THE NATIONAL DIET AND NUTRITION SURVEY

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Background Taste of food may be important in food choice and dietary intakes. While taste perception in the laboratory has been widely studied, it has rarely been taken into account when exploring dietary patterns in a population. The aim of this work is to identify consumers' taste perceptions for a list of commonly consumed foods.

Methods The National Diet and Nutrition Survey (NDNS) rolling programme year 9 (2016/17) was used to generate a list of foods consumed by adolescents (10–19 years old). 1748 different foods were grouped by food group, and sugar/salt contents into seven main and 23 subgroups. A pilot test was conducted to identify foods with high taste agreement to further limit the list. The shortened food list was included in an online food-taste classification survey which was distributed to Facebook groups and Twitter. Participants were asked to allocate one main taste of the five basic tastes (sweet, salty, sour, bitter or savoury/umami) to each food. Additionally, neutral and never tried options were provided. To minimize participant burden, the food list was divided into three and participants were asked to complete one part with an option to voluntarily complete the rest. Hierarchical cluster analysis was used to allocate foods into taste clusters. Number of clusters was determined based on the elbow method. Cluster linkage method used was based on a dendrogram and cophenetic correlation coefficient (CPCC).

Results The pilot questionnaire was completed by 19 participants. 15/19 rated 55 foods as the same taste and these were removed from the final questionnaire. The final food list contained 184 items. The main online questionnaire obtained 209 responses from 162 females, 44 males, (3 not known). The age range was from 18–70+ years with the majority between 40–59 years old. Seven reported having had COVID-19, but only three were tested positive (none experienced a taste loss). Cluster analysis classified foods into 6 taste clusters using the Average weighted linkage (CPCC=71%). Foods were classified as 21% sweet, 9% salty, 9% sour, 13% bitter, 18% savoury, and 29% neutral. These tastes have been applied to all the foods consumed by adolescents reported in the NDNS to generate taste patterns allowing us to explore links with diet and nutritional quality and anthropometry.

Conclusion We have characterised basic tastes for foods reported in the NDNS. This will allow us to create a UK food-taste database to explore dietary-taste patterns in the NDNS.

P22 PREVALENCE OF FOOD INSECURITY AND ITS ASSOCIATIONS WITH SOCIO-DEMOGRAPHIC FACTORS, FOOD SOURCES AND DIETARY DIVERSITY, IN SMALL ISLAND DEVELOPING STATES

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Background Small Island Developing States (SIDS) often lack food and nutrition security and sovereignty due to historically poor infrastructure to support local food systems, reduced domestic food production and increased reliance on generally processed imported foods. We aimed to estimate the prevalence of food insecurity (FI) and to investigate associations between FI and socio-demographic factors, food sources and dietary diversity score (DDS) in two SIDS: Fiji and Saint Vincent and the Grenadines (SVG).

Methods We conducted a cross-sectional survey with adults (≥15years) from 95 and 86 sampled households in Fiji and SVG, respectively. We recruited households from urban, rural, higher and lower income areas (n=184 individuals Fiji; n=144 SVG) and administered a context-relevant toolkit to collect individual-level information on FI, dietary intake to calculate DDS (scored out of 10, based on food groups consumed), food sources, socio-economic and health data. We administered the Food and Agriculture Organization's (FAO) Food Insecurity Experience Scale, and as recommended by FAO scaled the data using Rasch modelling, and defined FI as those in the moderate or severe categories. We undertook bivariate analyses to assess associations followed by multivariable logistic regression with FI as the dependent variable, adjusted for household clustering.

Results In Fiji and SVG respectively, 12.5% (95%CI 7.6, 17.9) and 35.4% (95%CI 27.6, 43.1) individuals experienced FI. A greater proportion of those experiencing FI were female and older adults, had less than secondary education, were urban residents and smaller (<3 members) households. In Fiji, mean DDS did not differ by FI status. However, in SVG mean DDS was lower among those experiencing FI (Diff -0.5, 95%CI: 0.0, -1.0; p=0.048). Regularly (>weekly) sourcing food from small shops was associated with FI in both countries, particularly in Fiji (47.8% FI vs 18.4% not FI, 95%CI on diff: 8.2, 50.7). In the multivariable analysis, FI was associated with females and regularly sourcing food from small shops in both countries. In Fiji, but not SVG, FI was associated with older age (Fiji OR 1.05; 95%CI 1.02, 1.08). Regularly sourcing food through borrowing/exchanging was associated with lower FI in SVG but not Fiji (SVG OR 0.38; 95%CI 0.15, 0.97).

Conclusion Policy action is needed to improve food security, particularly among women and older adults. Our findings indicate avenues for future research, such as the association between small shops and FI and the role that food borrowing/exchanging may play in improving food security and health in SIDS.