1.35,1.72) were more likely, and those who were underweight (0.42; 0.28,0.64) less likely, to share a household with an overweight or obese younger child. No difference was identified in relation to the reference child's sex (1.03; 0.95,1.12).

Conclusion Our findings suggest that, over a five-year period in a geographically-defined and ethnically-diverse population with high childhood obesity prevalence, linked NCMP and GP records can be used to identify households with a high burden of childhood obesity. Further analyses of household social, environmental and health characteristics is underway to identify potentially modifiable factors at the household level.

OP57 INEQUALITIES IN BMI IN SCOTLAND, 2008–2018: A REPEAT CROSS-SECTIONAL STUDY

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Background Obesity is associated with diseases such as cardiovascular disease and diabetes as well as mental health. Previously it was shown that the socioeconomic inequalities in adult BMI stabilised in Scotland between 2008 and 2014. The aim of this study is to describe the change in socioeconomic inequalities in BMI between 2008 and 2018.

Methods Data from the annual cross-sectional Scottish Health Survey between 2008 and 2018 for those aged 16–64 years were analysed. Survey years were grouped into 2008–2011, 2012–2015, 2016–2018 and the data were modelled using logistic modelling for outcome 'obese/less than obese' and linear modelling for outcome BMI, for males and females, adjusting for 10 year age group, survey year groupings and SIMD quintile. An interaction term between year and SIMD and year and age were included. Slope Index of Inequality (SII) and Relative Index of Inequality (RII) were calculated. Data were also analysed by 10-year age group.

Results Average BMI and prevalence of obesity increased from 27.2 and 24.9% in 2008 to 27.5 and 25.9% in 2018 among males, and from 27.3 and 26.5% in 2008 to 27.6 and 29.0% in 2018 among females. When broken down by age group, the majority of this increase is observed among females aged 25–34 years and 45–54 years. When the data were modelled, socioeconomic inequalities in BMI were observed for both males (eg average BMI was 0.48 (0.23, 0.73) more in SIMD1, most deprived, compared with SIMD 5) and females (eg OR of being obese in SIMD1 was 1.45 (1.28, 1.63) of SIMD5). There was a significant rise in BMI and obesity prevalence over time. An interaction term between survey year and SIMD, however showed that this rise was not observed in the two most affluent SIMD quintiles and the increase for the three less affluent SIMD quintiles rose in an approximately stepwise fashion, suggesting a widening of inequalities, eg for outcome obese/not obese, adjusting for age, sex, year and SIMD, an interaction term between SIMD and survey year showed an OR of obesity in 2008 in SIMD1 of 1.62 (1.42, 1.85) that of SIMD5, but for each additional year, OR rose by 1.03 (1.003, 1.05) for SIMD1 relative to SIMD5. Both RII and SII saw a large increase between 2012–15 and 2016–18 for males and females.

Conclusion Socioeconomic inequalities in BMI have previously thought to have plateaued, however this study shows that inequalities are now increasing.

OP58 AN INVESTIGATION INTO THE ASSOCIATIONS BETWEEN SOCIO-DEMOGRAPHIC FACTORS, FOOD SOURCES AND DIETARY QUALITY IN SMALL ISLAND DEVELOPING STATES

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Background Globally, some of the highest rates of obesity and non-communicable diseases (NCDs) are found in Small Island Developing States (SIDS). Relatedly, there has been a decrease in consumption of local foods and an increasing reliance on imported foods that are generally energy dense and highly processed. This study aimed to apply a novel quantitative toolkit to investigate the relationship between dietary diversity (DD) and food source, food insecurity and NCD risk in two SIDS: Fiji and Saint Vincent and the Grenadines (VCT).

Methods A dietary toolkit was developed to collect individual-level information on type and frequency of food consumed, food sources, food insecurity and relevant socioeconomic and health data. Regional investigators and partners ensured context-relevant content and implementation. In Fiji and VCT respectively, 95 and 86 households were recruited. All adults and adolescents (15 years and above) living in households, sampled to provide exposure to urban, rural, higher and lower income areas, were surveyed (n individuals=186 SVG; n=147 Fiji). Descriptive statistics and multiple linear regression, with DD as the dependant variable, adjusted for household sampling, were applied to explore associations between sociodemographic factors, food sources and dietary quality.

Results Mean DD score, of a possible score of 10, was 3.7 (SD1.4) in Fiji and 3.8 (SD1.5) in VCT, and this was consistent across sex, age and body mass index. In both settings, more people sourced food by purchasing than any other means (Fiji n=155(83%); VCT n=136(93%)). Regular consumption of own produce and regular food borrowing were associated with greater fruit consumption (difference in median number of servings/week: Fiji 1(95%CI 0,2); VCT 5 (95%CI 1,9) and Fiji 2(0,4); VCT 9(5,13)), respectively. Purchasing from a small shop was associated with higher consumption of sugar-sweetened beverages (Fiji 4(1,7); VCT 7 (1,13)). Multivariable analysis results, presented as adjusted regression coefficients (β (95%CI)), indicated that purchasing from a small shop was inversely associated with DD (-0.52 (-0.91, -0.12); p=0.011), as was rural residence (-0.46 (-0.92, 0.00); p=0.049). Borrowing food was positively associated with DD (0.73 (0.21, 1.25); p=0.006), as was age (0.01 (0.00, 0.03); p=0.063) and higher education (0.44 (0.06, 0.82); p=0.023).

Conclusion Our findings suggest barriers and facilitators to diet quality and links with food sources in SIDS that may