1.35; 1.72) were more likely, and those who were under-weight (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.

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

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