

**Methods** Data come from the British Regional Heart Study (BRHS) and the Health, Aging and Body Composition (HABC) Study. The BRHS included older men from 24 British towns aged 71–92 years in 2010–12 (n=2,147). The HABC Study, included 3,075 American men and women aged 71–80. In both studies, measures of oral health included tooth loss, periodontal disease, dry mouth, and self-rated oral health. Dietary data included dietary quality (Elderly Dietary Index in the BRHS, and Healthy Eating Score in the HABC Study) and intake (processed meat, calories from fat, protein and fruits and vegetables). Additionally in the BRHS, change in dietary quality was assessed over 10 years from 1998–2000 (age 60–79 years) to 2010–2012 (71–92 years).

**Results** In the BRHS, tooth loss, fair/poor self-rated oral health and accumulation of oral health problems were associated with poor dietary quality, after adjustment for age, social class, smoking, alcohol, history of cardiovascular disease (CVD) and diabetes, body mass index (BMI) and energy intake. Similar associations were observed for high intake of processed meat. Accumulation of oral health problems and self-rated oral health were associated with being in the top quartile of percentage of calories from saturated fat (fair/poor self-rated oral health, odds ratio (OR)=1.34, 95% CI 1.02–1.77) after adjustment for confounders. In the HABC study, no significant associations were observed between poor oral health and dietary quality after full adjustment. In the fully-adjusted model (age, gender, race, education, smoking, alcohol, history of CVD and diabetes, BMI and energy intake), periodontal disease was associated with the top quartile of percentage of calories from saturated fat (OR=1.48, 95%CI 1.09–2.01). In the BRHS, persistent low dietary quality over 10 years (from age 60–79 to 71–92 years), was associated with higher risk of tooth loss and accumulation of oral health problems at 71–92 years.

**Conclusion** Older individuals with oral health problems had poorer diets and consumed fewer nutrient-rich foods. Moreover, persistent poor dietary quality in older ages was associated with oral health problems later in life, suggesting bi-directional associations between oral health and dietary intake in older age. Improved management of nutrition and oral health are both important aspects of the health of older populations.

#### P15 CHILDRENS' FOOD AND BEVERAGE PORTION SIZES ON THE ISLAND OF IRELAND: A QUALITATIVE STUDY OF PARENTS' VIEWS AND PRACTICES

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**Background** Portion sizes of commercially available foods and beverages have increased since the 1980s, as have portion sizes consumed by children. Children's consumption of larger portion sizes is associated with higher energy intakes and weight status. Parents and guardians act as critical role models for children in the development of eating habits and often decide the amounts (portion sizes) their children are served. How parents portion foods and beverages, and how they decide the amounts to serve is an understudied domain.

Children's portion sizes, thus presents a clear, modifiable determinant of excess energy consumption in children and risk of weight gain.

**Methods** The primary aim of this qualitative study, was to understand parents' practices in portioning food and beverages for their children; their mechanisms for judging appropriate portion sizes and the factors influencing these judgements. A sample of 144 parents with at least one child aged 2–12 years who did not require a diet on medical grounds participated. Parents were recruited via purposive sampling of preschools and primary schools geographically located in either urban or rural areas of Northern Ireland and the Republic of Ireland, and classified as either higher or lower levels of disadvantage.

**Results** Parents reported that they do not consciously think about the portion size (quantity) that they give to their children but place greater focus on the types of food served. Generally, parents feel that the portion sizes that they give to their children are appropriate. This was reflected in the three main themes comprising of multiple sub-themes that were identified from the analysis: 1) Parental portioning practices - parent serves and permitting child to self-serve; 2) Factors influencing parental portioning including parent motivations, knowledge, child-related factors, family influences, school influences, food retail and other settings, socio-cultural influences and portioning resources used; 3) Parental views on portion size guidance including receptivity to portion size guidance and usefulness of guidance.

**Conclusion** Understanding how parents portion food for their children, the drivers of these practices and the type of information parents are receptive to will help inform future interventions and information campaigns to help parents understand child portion sizes. From this research it is evident that parents main concern regarding the amount that they feed their children is that their child eats enough to be fed. This amount is something that parents learn through experience of feeding their children and is highly specific to the appetite of each individual child.

#### P16 VEGETARIAN DIETS AND RISKS OF TOTAL AND SITE-SPECIFIC FRACTURES: RESULTS FROM THE PROSPECTIVE EPIC-OXFORD STUDY

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**Background** There is limited prospective evidence on possible differences in fracture risks between meat-eaters and vegetarians. We aimed to study this in a prospective cohort with a large proportion of non-meat eaters.

**Methods** In EPIC-Oxford, dietary information was collected at baseline (1993–2001) and subsequently around 2010. Participants were categorised into five diet groups at both time points (with 20,106 regular meat-eaters:  $\geq 50$  g of meat per day, 9,274 low meat-eaters:  $< 50$  g of meat per day, 8,037 fish-eaters, 15,499 vegetarians and 1,982 vegans at baseline for analyses of total fractures). Outcomes were identified through record linkage until mid-2016. Using multivariable Cox regression adjusted for socio-demographic, lifestyle confounders and body mass index (BMI), we estimated the risks