experimental, and clinical (case-control) studies were excluded. Reference lists of relevant papers were scanned for any additional articles of interest. Data extraction and methodological quality assessment using the STROBE checklist were conducted independently by two raters. Multi-level meta-analyses were conducted, with consideration of a number of potential moderators, including mean age of sample at baseline, length of follow-up, and quality of study.

Results After removal of duplicate references, all papers were screened for eligibility using a three-step process: 1) title screening (n=20,954); 2) abstract screening (n=981); and 3) full text screening (n=172). Inter-rater reliability at each stage of screening was >90%. A total of 17 studies (with 8 assessing depression as a binary variable and 9 assessing depression as a continuous variable) met eligibility criteria and had sufficient statistical information for extraction. The results of the meta-analyses will be presented and discussed with a focus on the effects of the key moderators that may influence the link between depression and memory decline, such as mean age at baseline, length of follow-up, and quality of study. Preliminary analyses suggest that affective problems significantly increase risk for subsequent decline in memory (Binary meta-analysis: OR=1.47; 95% CIs=1.15, 1.87, p=0.002; Continuous metaanalysis: B=-0.007, 95% CIs=-0.011, -0.002, p=0.003). Conclusions Results of the present study improve current understanding of the temporal nature of the association between depression and memory across the life-course. This has important implications for the identification of individuals who are at a particularly high risk for accelerated decline in memory function and dementia.

P10

## DIET QUALITY, SARCOPENIA AND FRAILTY IN OLDER MEN: CROSS SECTIONAL ANALYSIS FROM THE BRITISH REGIONAL HEART STUDY

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Background Frailty, a vulnerability to adverse health outcomes, and sarcopenia, a decline in muscle mass and strength or performance are associated with ageing. Frailty and sarcopenia predict increased mortality and hospitalisation, and sarcopenia often occurs with an increase in body fat known as sarcopenic obesity which elevates these risks further. Diet quality is well established as a predictor of mortality, but few studies have investigated diet quality in relation to frailty or sarcopenia, and findings are inconclusive. We have therefore examined the associations between diet quality, frailty and sarcopenic obesity categories.

Methods We used cross sectional data from community-dwelling men aged 71–91 years (British Regional Heart Study) in 2010–2012 recruited from 24 primary care practices. Men completed a food frequency questionnaire, from which the Healthy Dietary Index (HDI) and Elderly Dietary Index (EDI) were derived, and attended a physical examination. Frailty was based on the 5 components of the Fried frailty phenotype and we used a sarcopenic obesity classification which defines 4 groups; optimal, sarcopenic, obese or sarcopenic obese based on waist circumference and mid-arm muscle circumference.

We used logistic regression models to investigate whether diet quality was associated with frailty and sarcopenia and/or obesity.

Results 1331/3137 men (42%) had data for sarcopenia/obesity, all covariates and diet quality and 1119 men (36%) for frailty, covariates and diet quality. After adjusting for age, social class, region of residence, smoking, alcohol consumption, cardiovascular disease and energy intake, men in the top quartile of the HDI score had a lower odds of being frail (0.58 95% CI 0.34, 0.96) compared with men in the bottom quartile, and men in the top quartile of either HDI or EDI had a lower odds of being obese compared with men in the bottom quartile (0.52 95% CI 0.33, 0.84% and 0.57 95% CI 0.38, 0.86 respectively). Neither the HDI or EDI was associated with sarcopenia or sarcopenic obesity, and the EDI was not associated with frailty.

Conclusion Higher diet quality based on both the HDI and EDI is associated with obesity but we found no evidence that diet quality is associated with sarcopenia in these elderly British men. However, our findings suggest that a higher diet quality as indicated by the HDI, a measure of adherence to WHO nutrient intake guidelines, might be relevant for the prevention or reversal of frailty.

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## THE ENDURING INFLUENCE OF CONTROLLING PARENTING ON PERSONAL MASTERY IN OLDER AGE

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Background Personal mastery is the subjective feeling of control over the events in one's own life. It is associated with healthy ageing, including better cardio-metabolic health, immune function and physical functioning. As an adult mastery is strongly associated with achievements of education, income and social class. However, within-group differences indicate that there could be other ways to feel in control. Mastery is theorised to be a self-concept first learnt in adolescence, and as such family may play a role in shaping it. Those whose parents support them psychologically and allow them appropriate freedom as an adolescent may grow up perceiving themselves to be in control, over and above tangible socio-economic resources.

Data The Medical Research Council National Survey of Health and Development (NSHD) is a representative sample of births in mainland Britain that occurred during a week in March 1946. Participants were (n=1,037) study members who had provided data at ages 4, 26, 43 and 68. Controlling parenting was measured using the Parental Bonding Instrument (PBI). This measures percieved parental levels of psychological control (e.g. invasiveness, overprotection).

The outcome was personal mastery assessed at age 68 using Pearlin's 7 item scale. An example item is, "I have little control over the things that happen to me." Multivariable regression analysis was used to test the association between psychologically controlling parenting and personal mastery age 68, controlling for childhood and adult socio-economic markers.

Results Higher perceived parental psychological control was associated with lower mean mastery -0.12 (95% 0.20,-0.04)