population, along with information from the local care home inspectorate. Analyses were performed using Cox regression models with hazard of care home admission as the outcome.

**Participants** 55,440 people aged 65 years or older and not living in care homes at the time of the Census.

**Main outcome measures** Permanent admission to a care home for older people, identified by change of address (from health card registration information) to a registered nursing or residential home (from inspectorate information).

**Results** In unadjusted models, women were 80% more likely to be admitted to a care home than men (HR 1.80 95% CI 1.65 to 1.96), while in fully adjusted models, the risk averaging across all living arrangements was 10% higher (HR 1.10 95% CI 1.00 to 1.20). There was however variation in the risk by living arrangements. After controlling for age, there was no raised admission risk for females among people living alone (HR 1.05 95% CI 0.93 to 1.19), or with siblings (HR 1.04 95% CI 0.64 to 1.68), however there was a higher risk when looking at the 20,972 cohort members living with a partner (HR 1.54 CI 1.14 to 1.59). There was no evidence of variation with health status of co-residents.

**Conclusions** Apart from age, the single biggest contribution to the raised admission risk is living arrangements. There are no apparent gender differences among people living alone or with siblings, whereas the risk is higher for women living with a partner. This suggests that the support provided within the home is different, and that women receive less support from their husbands than men receive from their wives. Further research should investigate the effect of co-resident gender on living arrangements among people living with children.

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**Wednesday 8 September 2010**

**Parallel Session D**

**Food policy**

**ESTIMATING THE UK CARDIOVASCULAR MORTALITY REDUCTION EXPECTED WITH DIFFERENT FOOD POLICY OPTIONS**

**Objective** To estimate the reduction in UK cardiovascular mortality potentially achievable by decreasing saturated fat, trans-fat and salt consumption and fruit and vegetable consumption.

**Methods** Cardiovascular Disease (CVD) mortality reductions were calculated by synthesising data on population, diet, cholesterol levels, blood pressure, and CVD mortality rates. Contemporary mortality and dietary data among UK adults 25 to 84 years old were obtained from official statistics. We quantified the aetiological effects of specific dietary factors on cholesterol levels, blood pressure, and CVD mortality using systematic reviews and meta-analyses. The number of CVD deaths achievable by reducing saturated fat, trans fat, and salt consumption and fruits and vegetables was estimated for a variety of dietary policy scenarios. Results were stratified by 10-group age and sex.

A probabilistic sensitivity analysis was then conducted. Using Monte-Carlo simulation, best, maximum and minimum estimates were calculated.

**Results** Reducing salt consumption by 1 g/day, saturated fat by 1% of energy intake and trans fat by 0.5%, and of fruits and vegetable intake 1 portion per day would result in approximately 13,850 fewer CVD deaths per year. These would comprise 4,790 (minimum estimate 4,620, maximum estimate 4,910) fewer coronary heart disease deaths among men and 1,840 (minimum estimate 1,790, maximum estimate 1,900) among women, along with 4,000 (minimum estimate 3,910, maximum estimate 4,100) fewer stroke deaths in men, 3,230 in women (minimum estimate 3,160, maximum estimate 3,310). Approximately 26% of the 13,850 mortality decrease would be attributed to decreased transaturated fat consumption, 27% to increased fruits and vegetables consumption 24% to decreased saturated fat consumption, and 25% to decreased salt consumption. More substantial dietary improvements could result in approximately 38,100 fewer CVD deaths (min 37,900, max 39,100).

**Conclusions** The CVD burden attributable to saturated fat, transaturated fat, salt and, fruits and vegetable consumption is substantial. Food policies resulting in even small dietary changes could result in approximately 20,000 fewer CVD deaths each year. This would represent a 9% reduction in UK cardiovascular mortality. Similar benefits might be expected in other industrialised populations.

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**FOOD INSECURITY, WELL-BEING AND INEQUALITIES IN DIET IN UK WOMEN**

**Objective** Prevalence of household food insecurity varies between populations, but is higher among those who have low incomes, poor...