**Abstract**

Experiences of nausea and/or vomiting in pregnancy (NVP) vary greatly, but the paucity of studies with pre-pregnancy dietary data mean that little is known about the effects of NVP on diet. Using an administered food frequency questionnaire, diet was assessed before pregnancy and at 11 and 34 weeks’ gestation in 2270 participants in a UK birth cohort study (Southampton Women’s Survey). Experience of NVP in early pregnancy was graded as none, mild, moderate or severe. Participants reported their level of food consumption as more, the same or less than before pregnancy. ‘Prudent’ diet scores (derived using principal component analysis) were used to describe participants’ diet quality before, in early and late pregnancy.

In early pregnancy, 89% of women were nauseous, although most commonly the NVP experienced was mild (48%) or moderate (30%); 11% had severe NVP. 39% of women reported an increase in their level of food intake in early pregnancy; 34% reported a reduction. Increasing severity of nausea was associated with changes in intake of a range of foods, most notably reduced consumption of vegetables, tea/coffee, rice/pasta, breakfast cereals, beans/pulses and citrus fruits/fruit juices and increased consumption of white bread, and soft drinks. Increasing severity of nausea was also associated with decreasing prudent diet score from before to early pregnancy, such that women with severe nausea had prudent diet scores 0.29 SDs lower than those with no nausea (P<0.001). However, this was transient as NVP was not related to change in diet quality from before to late pregnancy.

**Keywords** Nausea, vomiting, pregnancy, diet, food frequency questionnaire, cohort study