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# The Relationship between Socioeconomic Status and Nutritional knowledge in Women during Pregnancy

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## The relationship between socioeconomic status and nutritional knowledge in women during pregnancy

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Epidemiological data have shown that socioeconomic status affects nutritional knowledge and dietary quality<sup>(1)</sup>. Irish national food surveys have also suggested that socioeconomic differences in food group, nutrient intakes, dietary attitudes and health behaviours exist<sup>(2,3)</sup>. It is known that pregnancy can enhance a women’s nutritional awareness<sup>(4)</sup>. The aim of the present study was to assess whether nutritional knowledge in pregnant women in Ireland is affected by socioeconomic status.

One hundred and sixteen pregnant women aged 16–41 years (mean age of 29.5 years) were recruited at their initial antenatal booking visit (10–15 weeks gestation) at a large Dublin maternity hospital. Formal education and material deprivation were used to assess the socioeconomic status of respondents. The women were classified into three educational categories: no formal education to lower secondary education, upper secondary education and third level education. Deprivation status was assessed by determining the number of basic necessities<sup>(5)</sup> respondents had had to forego in the previous year due to lack of money, with respondents categorised into three groupings: low(none), medium(1–2) and high (3+).

The women’s level of nutritional knowledge was assessed using a self-administered questionnaire of 12 multiple choice questions. The questions were formulated from the Best Practice for Infant Feeding in Ireland guidelines published by the Food Safety Authority of Ireland in 2012<sup>(6)</sup>. The questionnaire assessed respondents’ knowledge regarding essential food groups and nutrients in pregnancy as well as lifestyle factors such as smoking and exercise. Each respondent received a score out of 12 on their nutritional knowledge questionnaire (max. = 11, min. = 1), with participants then categorised as having high (score  $\geq 7$ ) or low (score  $\leq 6$ ) nutritional knowledge based on these scores.

|                            | No/Primary/Lower secondary education | Upper secondary education | Third level education | Significance |
|----------------------------|--------------------------------------|---------------------------|-----------------------|--------------|
| Low nutritional knowledge  | 8                                    | 21                        | 15                    |              |
| High nutritional knowledge | 5                                    | 16                        | 51                    | $p = 0.01$   |

Pearson’s chi-square test.

The results of a Pearson’s chi-square test confirmed that formal education was inversely related to nutritional knowledge ( $p < 0.05$ ). When adjusted for the confounding effect of material disadvantage (as assessed by deprivation status), low formal education remained predictive of a lower nutritional knowledge score ( $p = 0.02$ ), while deprivation status did not predict poorer knowledge scores ( $p = 0.278$ ). This indicates that socio-ecological rather than material disadvantage is the primary predictor of poor nutritional knowledge in this group.

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