

Sociodemographic factors associated with calcium intake in premenopausal women: a cross-sectional study

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Background - While it is well recognized that many women do not achieve the recommended daily intake (RDI) of calcium, the reasons for this are unclear.

Objectives - To describe the associations between sociodemographic factors and calcium intake in pre-menopausal women and to determine the effect of having low milk intake on meeting the RDI for calcium.

Design - A cross-sectional study of 467 randomly-selected women aged 25-44 years was performed with measurement of sociodemographic factors, anthropometrics, osteoporosis knowledge, osteoporosis self-efficacy and calcium intake.

Outcomes - Mean daily total calcium intake was 789 mg (IQR 511 to 983). Education level, calcium-specific osteoporosis knowledge and self-efficacy were all independently associated with calcium intake ($p < 0.05$). There were no associations between calcium intake and hours of employment, smoking history, marital status, age, family or personal history of fracture, number of children or having ever breastfed. The odds of achieving the RDI for calcium increased with higher levels of calcium-specific self-efficacy and knowledge, and decreased in current smokers or if the main financial provider in the household was unemployed ($p < 0.05$). Women drinking more than 300 ml of milk per day were more likely to meet the RDI for calcium (OR 11.1, 95%CI 6.6-18.7).

Conclusion - Women who have lower levels of education, who are in households where the main financial provider is unemployed, who are smokers, and those with low levels of calcium-specific self-efficacy and knowledge, are at risk of not achieving adequate calcium intake. This information will inform public health strategies aimed at improving the calcium intake of women in this age group.