

# Abstract

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## Low micronutrient levels as a predictor of incident disability in older women.

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**BACKGROUND:** The role of nutritional status in the disablement process is still unclear. The objective of this study was to assess whether low concentrations of nutrients predict the development and course of disability.

**METHODS:** Longitudinal study including community-dwelling women 65 years or older enrolled in the Women's Health and Aging Study I. In total, 643 women were assessed prospectively at 6-month intervals from 1992 to 1995.

**RESULTS:** Incidence rates of disability in activities of daily living (ADLs) during 3 years of follow-up. Incidence rates in the lowest quartile of each selected nutrient were compared with those in the upper quartiles. The hazard ratios were estimated from Cox models adjusted for potential confounders. Women in the lowest quartile of serum concentrations of vitamin B(6) (hazard ratio [HR], 1.31; 95% confidence interval [CI], 1.03-1.67), vitamin B(12) (HR, 1.40; 95% CI, 1.12-1.74), and selenium (HR, 1.38; 95% CI, 1.12-1.71) had significantly higher risk of disability in ADLs during 3 years of follow-up compared with women in the upper 3 quartiles.

**CONCLUSIONS:** Low serum concentrations of vitamins B(6) and B(12) and selenium predict subsequent disability in ADLs in older women living in the community. Nutritional status is one of the key factors to be considered in the development of strategies aimed at preventing or delaying the disablement process.

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