

# Risk of cardiovascular death doubled in women with high calcium intake

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High intakes of calcium (corresponding to diet and supplements) in women are associated with a higher risk of death from all causes, but cardiovascular disease in particular, compared with women with lower calcium intake, a study published on *bmj.com* suggests.

Experts recommend a high [calcium intake](#) (as it plays a [pivotal role](#) in [human physiology](#)) and as such, more than 60% of middle-aged and older women in the USA now take supplements.

However, recent trials have indicated a higher risk of ischemic [heart disease](#) and stroke with [calcium supplements](#) but this was not observed in another trial and few studies have examined this association.

Researchers from Uppsala University in Sweden therefore studied 61,443 Swedish women (born between 1914 and 1948) for an average of 19 years to test this association.

Data were taken from the Swedish Cause of Death Registry and data on diet were taken from the Swedish Mammography Cohort. Total calcium intake included supplemental calcium. The mean intake in the lowest quartile was 572mg/day (the equivalent of five slices of cheese ) and in the highest 2137mg/day.

Information was obtained from the women on menopausal status, postmenopausal oestrogen therapy, parity information, weight and height, smoking habits, leisure-time physical activity and educational

level.

Results showed that during 19 years of follow-up, 11,944 women (17%) died: 3,862 of these (32%) died from cardiovascular disease, 1932 (16%) heart disease and 1100 (8%) from stroke. Highest rates of all-cause, cardiovascular and heart disease were observed among those with a [dietary calcium](#) intake higher than 1400mg/day.

In addition, researchers observed higher [death rates](#) among women with an intake below 600mg/day.

Women who had a higher dietary intake of calcium exceeding 1400mg/day and also used supplements had a higher death rate compared to those not taking supplements. Women with a high dietary calcium intake (>1400 mg/day) were more than twice as likely to die compared with women with a 600-999mg/day calcium intake.

The researchers explain their findings by suggesting that diets very low or very high in calcium can override normal homeostatic control causing changes in blood levels of calcium.

The researchers conclude that high calcium is associated with "higher all-cause and cardiovascular mortality rates" and so to prevent fractures in the elderly emphasis should be placed on individuals with a low intake of calcium rather than increasing the intake of those already consuming satisfactory amounts.

Provided by British Medical Journal

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