

March 16th, 2011

A recent study involving a large group of women studied over 26 years found that those with the highest magnesium intake (and corresponding plasma levels) had a 41% lower risk of sudden cardiac death.

MAGNESIUM REDUCES RISK OF SUDDEN CARDIAC DEATH IN WOMEN

Magnesium has beneficial cardiovascular properties in cellular and experimental models, but its relation to sudden cardiac death (SCD) risk in humans is unclear.

In a recent study published in the *American Journal of Clinical Nutrition*, researchers examined the association between magnesium, as measured in diet and plasma, and risk of SCD. The association for magnesium intake was examined prospectively in 88,375 women who were free of disease in 1980 and part of the Nurses' Health Study. Information on magnesium intake, other nutrients, and lifestyle factors was updated every 2–4 years through questionnaires. In this group of women, there were 505 cases of sudden or arrhythmic death documented over 26 years of follow-up.

After adjustment for confounders and potential intermediaries, the relative risk of SCD was significantly lower in women in the highest quartile of both dietary intake and plasma levels of magnesium (when compared to those in the lowest quartile). The inverse relation with SCD was stronger for plasma magnesium than dietary intake of magnesium, with each 0.25 mg/dL (one standard deviation) increment in plasma magnesium associated with a 41% lower risk of SCD.

In this study group of women, higher plasma concentrations and dietary intakes of magnesium were associated with lower risks of SCD. The researchers stated that if the observation is causal, interventions aimed at increasing dietary or plasma magnesium might lower the risk of sudden cardiac death.

Chiuvè SE, et al. Plasma and dietary magnesium and risk of sudden cardiac death in women. 2011. *Am J Clin Nutr* 93(2):253-260.