

## **Keep up your calcium!**

***There have been several recent stories and reports in the press and on radio about Calcium Supplements and an increased risk of associated heart disease. These reports are based on research published last year by Prof. Ian Reid, from the University of Auckland, NZ.***

The results of this study by Prof. Reid do not provide sufficient evidence to recommend that older women should stop taking calcium supplements because of an increased risk of heart disease. In this one study, 36 women presented with heart attacks who were taking the calcium supplement compared to 22 on the placebo, however it was not clear if the subjects in each group (placebo or calcium supplement) had the same degree of atherosclerosis or cardiovascular disease risk factors before taking the supplement.

There have been a number of large, long-term studies of more than 10 years, which did not identify any adverse effects of calcium supplement on risk of heart disease and stroke. In fact, some studies found that those consuming more calcium had a reduced risk of heart attacks and strokes. For example 85,764 women in the Nurses' Health Study cohort, were followed for 14 years, after 1.16 million person-years they found that there was a long-term protective effect of calcium supplementation on ischemic stroke (Iso H. et al 1999). Another similar study in men (Health Professionals Follow-up Study) found, after 12 years (415,965 person-years), that neither dietary, nor supplemental intakes of calcium were related to the risk of heart disease (Al-Delaimy WK. et al 2003). Finally in a large study that assessed the effect of calcium supplements in 36,282 postmenopausal women with vitamin D for 7 years found that calcium/vitamin D supplementation neither increased, nor decreased, heart attacks or strokes in generally healthy postmenopausal women (Hsia J. et al 2007).

In addition to the observational data other randomised controlled trials in patients taking calcium compared to placebo did not show any increased risk of heart disease (Prince et al 2006) or death (Grant et al 2005: Prince et al 2006)

The weight of evidence to date indicates no increased risk of heart attacks or stroke with increased calcium intakes from diet or supplements.

Of those who fracture a hip over 20% will die within 6 months and of the survivors 50% will not be able to walk without assistance, and 50% will need full-time nursing care (The Burden of Brittle Bones 2007). Calcium supplementation is effective in reducing fractures and reducing bone loss in older men and women, particularly in those on low intakes of dietary calcium (Tang et al. 2007).

Preventing a fracture when we are older means that we are more likely to be able to maintain a better quality of life as we age: remaining mobile and living independently and making sure we consume sufficient calcium can help reduce our risk of fracture. This should remain the case.

#### **References**

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