

EDITORIAL

Calcium and vitamin D for chronic disease: a time for action

European Journal of Clinical Nutrition (2011) **65**, 985;
doi:10.1038/ejcn.2011.112

Obesity and its co-morbidities of dyslipidaemia, insulin resistance and cardiovascular disease are global issues. Interestingly, poor calcium intake and vitamin D inadequacy are also worldwide problems with links to chronic disease (Hollick and Chen, 2008; Peterlik *et al.*, 2009; Norman and Bouillon, 2010). Such observations provide a potential basis for public health action if the spectrum of research findings in the area are accepted. Both calcium and vitamin D have many biological effects, and determining the adequacy of each nutrient alone or in combination would depend on which end point is of greatest concern. Over the years, scientists have argued that in establishing nutrition priorities or preventative guidelines for specific diseases, a balanced view of all the available evidence is a far more pragmatic approach (Truswell, 2001; Mann, 2002; Blumberg *et al.*, 2010). However, a recent influential report by the Institute of Medicine of the National Academies has advocated calcium and vitamin D only for bone and musculoskeletal health (Institute of Medicine, 2010). The fallout from such a decision resonates in the detail of many invited opinions on this research document (Yngve *et al.*, 2011).

In this special issue, four groups present their views on the matter. Mason *et al.* (2011) remind us of the normal physiology and metabolism of calcium and vitamin D as it pertains to bone health and to chronic disease. Soares *et al.* (2011) examine randomized controlled trials to specifically determine whether calcium and/or vitamin D accelerate weight or fat loss. Mitri *et al.* (2011) provide a meta-analysis on the potential benefits of vitamin D for type 2 diabetes. Finally, Grant (2011) estimates the global reduction in mortality rates through an improvement in vitamin D status. Perhaps the Institute of Medicine report has presented us with a challenge. If these recommendations as well as those of other nations are to be influenced at their next iteration, it is time to act. The papers in this special issue are a small step in that direction.

Conflict of interest

The author declares no conflict of interest.

MJ Soares
*Program of Nutrition, School of Public Health,
Curtin University, Perth,
Western Australia, Australia*
E-mail: m.soares@curtin.edu.au

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