Vitamin D symposium

The symposium ‘Should Australia and New Zealand allow more vitamin D into the food supply?’ was held at Deakin University, City Centre, Melbourne, on 12 June 2012. It was organised by the Academy’s National Committee for Nutrition and the International Life Sciences Institute Southeast Asia Region Australasia, in conjunction with the Nutrition Society of Australia, to raise awareness of vitamin D deficiency in Australia and New Zealand and highlight the need for the government to urgently consider allowing more vitamin D into the food supply. Eighty-three health professionals, academics, food industry representatives and dietitians attended the one-day meeting.

Vitamin D is a fat-soluble vitamin which our bodies make when skin is exposed to sunlight. At the symposium Professor Caryl Nowson, member of the National Committee for Nutrition and Chair of Nutrition and Ageing, Deakin University, outlined the progression of knowledge regarding vitamin D, from about 1920 when cod liver oil was used for rickets to the present day where there is Level 1 evidence for vitamin D deficiency relating to falls, fracture and all cause mortality, and weaker evidence for a relationship with numerous other diseases. We evolved as hunter-gatherers in Africa but modern indoor lifestyles and the wearing of clothing in cooler climates contribute to low sunlight exposure and hence low vitamin D status. Minor amounts of vitamin D can also be obtained from food. Professor Nowson concluded that only a small amount of dietary vitamin D is required to avert frank deficiency (rickets in infants and young children and osteomalacia in adults), and that this could be achieved using a wide variety of fortified foods.

Professor Rob Daly, Chair of Exercise and Ageing, Deakin University, spoke about vitamin D status and optimal levels and concluded that there is an urgent need to improve the vitamin D status of all Australians and New Zealanders.

Professor Rebecca Mason from the University of Sydney highlighted the need for a balance between skin damage and vitamin D production. While those at high risk of skin damage and disease need to avoid the sun, others can have short but frequent periods of exposure to sunlight. Another speaker indicated that mushrooms grown indoors can be flash-illuminated before sale to provide a dietary source of vitamin D2 which is bioavailable, shelf stable and cooking stable.

Dr Susan Whiting, Professor of Nutrition and Dietetics at the University of Saskatchewan, discussed the Canadian experience of mandatory vitamin D fortification of fluid milk and margarine since 1975. She noted that Canadians have benefited from vitamin D fortified milk which has helped prevent childhood rickets.

Dr Andre Renzaho of Monash University indicated that vitamin D status is an urgent issue for migrant populations and Indigenous Australians. Dr Georgia Paxton from the Royal Children’s Hospital in Melbourne said that vitamin D is a high priority issue for both children and pregnant women, and that there are about 250 cases a year of children from Victoria with vitamin D deficiency rickets.

Ms Janine Lewis from Food Standards Australia New Zealand estimated that voluntary vitamin D food fortification could take 9–12 months for approval, and that a best-case scenario for mandatory fortification could take two to three years. The closing panel discussion concluded that Australia should be adding vitamin D to the food supply.