

Application to amend the Australia New Zealand Food Standards Code – Table to Clause 3 Permitted addition of vitamins and minerals to food of Standard 1.3.2 Vitamins and Minerals

Executive Summary

The purpose of this application is to amend the *Table to clause 3 Permitted addition of vitamins and minerals to food* of Standard 1.3.2 – *Vitamins and Minerals* of the *Australia New Zealand Food Standards Code* (the Code), to permit the addition of vitamin D3 to “breakfast cereals, as purchased”. We request permission for the voluntary addition of Vitamin D3 to breakfast cereals. This is to provide consumers with alternative food sources of vitamin D. This application will focus only on vitamin D3, as DSM currently do not manufacture and do not have data on vitamin D2.

Recent reports to assess the vitamin D status of the Australian and New Zealand populations have concluded that significant percentages are deficient or insufficient in vitamin D. In a nationwide study by Daly *et al.* (2012), it was found that nearly 1/3 of Australian adults aged ≥ 25 years were deficient in vitamin D. Almost 50% of New Zealand children and adults were estimated to be vitamin D-insufficient in New Zealand national nutrition surveys, based on low serum 25(OH)D concentrations (< 50 nmol/L) (Rockell *et al.* 2005 and 2006). In the recent 2012 report of “*Vitamin D of New Zealand Adults: Findings from the 2008/09 New Zealand Adult Nutrition Survey*” released by the New Zealand Ministry of Health (MOH 2012), it was found that 1 in 4 adults (27.1%) were below the recommended level of vitamin D [i.e. 25-49 nmol/L of serum 25(OH)D level].

The average estimated dietary intake of vitamin D for adults in Australia is less than 3 $\mu\text{g}/\text{day}$ (Nowson & Margerison 2002), which is significantly lower than the vitamin D’s AI of 5, 10 and 15 $\mu\text{g}/\text{day}$ for adults aged 19-50, 51-70 and 70+ years, respectively (NHMRC 2006). The 2007 Australian Children’s National Nutrition Survey (2-16 years) also showed similar low dietary intake of vitamin D with a mean intake in children aged 2-16 years of 2.8-3.4 $\mu\text{g}/\text{day}$, which were considerably less than the vitamin D’s AI of 5 $\mu\text{g}/\text{day}$ for children aged 1-18 years (CSIRO 2008).

Food fortification has proven to be a cost effective way to address nutrient deficiencies in a population and is a viable option to help address vitamin D deficiencies in the Australia and New Zealand. A systematic review on the efficacy of food fortification on serum 25(OH)D concentrations found that 8 out of 9 randomised controlled trials ($n = 889$ subjects) consistently showed a significant beneficial effect of food fortification on 25(OH)D concentrations in younger and older adults (O’Donnell *et al.* 2008).

While most other countries permit the voluntary fortification of a wide range of foods with vitamin D, there are currently only a limited number of products in the Australia and New Zealand market that are permitted to have vitamin D added. The propose amendment of Table to clause 3 Permitted addition of vitamins and minerals to food in Standard 1.3.2 – *Vitamins and Minerals* of the *Australia New Zealand Food Standards Code* to allow the fortification of breakfast cereals with vitamin D3 would provide an additional food source of vitamin D in Australia and New Zealand.