

## A1090 – Voluntary Addition of Vitamin D to Breakfast Cereal

February 2015

The Dietitians Association of Australia (DAA) is the national association of the dietetic profession with over 5800 members, and branches in each state and territory. DAA is a leader in nutrition and advocates for better food, better health, and wellbeing for all. DAA appreciates the opportunity to provide feedback on A1090 - Voluntary Addition of Vitamin D to Breakfast Cereal by the Food Standards Australia New Zealand.

Contact Person: Gabrielle Ryan  
Position: Professional Services Cadet Dietitian  
Organisation: Dietitians Association of Australia  
Address: 1/8 Phipps Close, Deakin ACT 2600  
Telephone: 02 6163 5200  
Facsimile: 02 6282 9888  
Email: [pscadet@daa.asn.au](mailto:pscadet@daa.asn.au)

## DAA interest in this consultation

DAA advocates for a safe and nutritious food supply in which the community has confidence and which meets the nutritional needs of all Australians, including groups with special needs

As experts in nutrition, Accredited Practising Dietitians (APDs) assist the general population and groups with special dietary needs to meet their nutritional needs. APDs also assist with the translation of food labels and nutrition content claims.

## Recommendations

DAA supports the application to amend Standard 1.3.2 – Vitamins and Minerals in the Australia New Zealand Food Standards Code to permit the voluntary fortification of “breakfast cereals as purchased” with vitamin D: D<sub>2</sub> and D<sub>3</sub> and to permit a maximum claim of 2.5ug, corresponding to 25% of 10ug regulatory Recommended Dietary Intake (rRDI), per normal serving.

Further research into the prevalence of vitamin D deficiency and the standardisation of vitamin D testing methods should be conducted to determine whether mandatory fortification of vitamin D is warranted.

## Discussion

DAA acknowledges vitamin D is an important hormone necessary for normal musculoskeletal development and maintenance of bone density.<sup>1</sup> Vitamin D can be obtained from the action of sunlight on skin, most Australians obtain vitamin D this way. During the winter, vitamin D stored in the adipose tissue is isolated and used by the body. Small amounts of vitamin D can also be obtained through diet.

DAA understands the uncertainties regarding the accuracy of vitamin D testing, and the dispute regarding defining optimal levels of vitamin D for health.<sup>2</sup> Moderate to severe vitamin D deficiency (25-hydroxyvitamin D <30nanomol/L) is causally associated with osteomalacia and rickets in children.<sup>3</sup> Mild vitamin D deficiency (25-hydroxyvitamin D <50nanomol/L) is associated with bone fractures in adults.<sup>3,4</sup> At greatest risk of inadequate vitamin D levels include housebound individuals, community dwelling older and/or disabled people, those in residential care, dark-skinned people, those who wear heavy cultural clothing and those who work indoors or avoid sun exposure.<sup>5</sup>

Whilst DAA notes that a proportion of the Australian population are vitamin D deficient, this has not been deemed serious enough to warrant mandatory fortification. Given this application is for voluntary fortification, DAA agrees that the addition of vitamin D to some cereals would provide an additional food source for individuals diagnosed as being deficient.

DAA acknowledges that other foods such as oil spreads and some milks are fortified with vitamin D.<sup>7</sup> Breakfast cereals are a suitable vehicle for additional fortification, being a food consumed by many Australians<sup>8</sup> and New Zealanders.<sup>9</sup> Fortification could have a beneficial effect by providing an additional food source of this vitamin.

DAA notes that some breakfast cereals are classified as discretionary foods (breakfast cereals with >30 g sugar per 100g or breakfast cereals with added fruit containing >35 g sugar/100g).<sup>10</sup> The voluntary fortification of breakfast cereals with vitamin D raised some concerns among members that manufacturers would be presented with another selling point for discretionary breakfast cereals. The data available shows the proportion of energy obtained from discretionary breakfast cereals by Australians is equivalent to 0.2%.<sup>8</sup> In other words, most breakfast cereal consumers are choosing non-discretionary varieties. As addressed in the consultation paper, considering that breakfast cereals are currently fortified with several vitamins and minerals, fortification does not offer a greater incentive for consumers to select discretionary breakfast cereals. Therefore it is not likely that Australians will choose to consume more discretionary breakfast cereal if this application is approved.

## Summary

DAA supports this application considering the following points as outlined in the consultation paper and supporting documents:

- Recent national biomedical surveys for Australia showed that some sub-populations (indigenous and some migrant groups) are at risk of low vitamin D status, and this risk increases during winter months.
- Although the absorption of vitamin D from breakfast cereal has not been specifically tested, most breakfast cereals contain 1-5g fat per 100g (higher levels in oat-based cereals or those containing nuts) so consumption of vitamin D-fortified cereals with or without milk is likely to result in absorption of vitamin D.
- Such fortification has the potential to increase the vitamin D intake of individuals who are vitamin D deficient.
- Fortification of breakfast cereal with vitamin D at the modelled level does not pose a risk to public health and safety.

- The public safety of fortification of cereals with vitamin D has been demonstrated in the USA, Europe, the United Kingdom and some Asian countries that already allow fortification of breakfast cereals with vitamin D.

## References

1. Joshi D, Center JR, Eisman JA. Vitamin D deficiency in adults. *Australian Prescriber* 2010; 33 (4): 103-106.
2. Lucas R, Neal R. What is the optimal level of vitamin D? Separating the evidence from the rhetoric. *Australian Family Physician* 2014; 43 (3): 119-122.
3. Holick MF & Chan TC. Vitamin D deficiency: A worldwide problem with health consequences<sup>1-4</sup>. *American Journal of Clinical Nutrition* 2008; 87 (4):10805-10865.
4. Glendenning P. Measuring vitamin D. *Australian Prescriber* 2015; 38: 12-15.
5. Nowson CA, McGrath JJ, Ebeling PR *et al*. Vitamin D and health in adults in Australia and New Zealand: A position statement. *Medical Journal of Australia* 2012; 196 (11): 686-687.
6. Daly RM, Gagnon C, Lu ZX *et al*. Prevalence of vitamin D deficiency and its determinants in Australian adults aged 25 years and older: a national, population-based study. *Clin Endocrinol (Oxf)* 2012; 77 (1): 26-35.
7. Nowson, CA, Margerison C. Vitamin D intake and vitamin D status of Australians. *Medical journal of Australia* 2002; 177 (3) (): 149-152.
8. ABS. Australian Health Survey: Nutrition First Results, 2011-12. Canberra: Australian Bureau of Statistics; 2014.
9. University of Otago and Ministry of Health. 2011. A Focus on Nutrition: Key findings of the 2008/09 New Zealand Adult Nutrition Survey. Wellington: Ministry of Health.10.
10. Dietitians Association of Australia, A modelling system to inform the revision of the Australian Guide to Healthy Eating. Canberra: National Health and Medical Research Council & Department of Health and Ageing; 2011.  
[http://www.nhmrc.gov.au/files/nhmrc/file/publications/n55c\\_australian\\_dietary\\_guidelines\\_food\\_modelling.pdf](http://www.nhmrc.gov.au/files/nhmrc/file/publications/n55c_australian_dietary_guidelines_food_modelling.pdf)