Proceedings of the Nutrition Society (2015), **74 (OCE5)**, E303 doi:10.1017/S002966511500350X

Summer Meeting, 6–9 July 2015, The future of animal products in the human diet: health and environmental concerns

A label-based assessment of the iodine content of milk-alternative drinks available in the UK

S.C. Bath, C.J. Nezianya and M.P. Rayman

Department of Nutritional Sciences, Faculty of Health and Medical Sciences, University of Surrey, Guildford, Surrey, GU2 7XH

UK milk is a rich source of iodine [average concentration 300 μg/L[1]] and, together with dairy products, is the principal source of iodine intake[2]. UK sales of milk alternatives (e.g. soya drinks) increased by 155 % between 2011 and 2013[3]. As consumers may be choosing milk-alternatives in place of iodine-rich milk, we aimed to collate data on the iodine content of these products.

A survey of UK grocery stores (n = 20) identified 28 milk-alternative brands. Ingredient information was taken from the product label and companies were contacted for data on the iodine content of milk-alternative drinks.

Only three of 28 brands (10·7 %) had information on the iodine content of their products. Of those, two stated the iodine content on the label; these products were fortified to give an iodine concentration of 225/230 μg/L. One brand of oat drink had a reported content of 1 μg/L. As reported in the literature, the values for the iodine content of unfortified soya and rice drinks ranged from 10–29 μg/L. Four brands used seaweed for calcium enrichment and, based on the literature, their estimated iodine content was 40–50 μg/L.

Matrix	Brands producing milk-alternative*†	Number of drinks identified‡	Brands fortified with iodine§	Iodine content stated on packaging§	Iodine content known by manufacturer§
Soya	19 (67·9)	77	2 (10·5)	2 (10·5)	2 (10·5)
Almond	9 (32·1)	23	0 (0)	0 (0)	0 (0)
Rice	6 (21·4)	15	0 (0)	0 (0)	0 (0)
Oat	6 (21·4)	10	0 (0)	0 (0)	1 (16·7)
Coconut	3 (10·7)	7	0 (0)	0 (0)	0 (0)
Hazelnut	3 (10·7)	4	0 (0)	0 (0)	0 (0)
Hemp	1 (3·5)	1	0 (0)	0 (0)	0 (0)
Quinoa	1 (3·5)	1	0 (0)	0 (0)	0 (0)
Spelt	1 (3·5)	1	0 (0)	0 (0)	0 (0)

* includes supermarket own-brand products;
† Figures are n (%) and percentage is based on a total of 28 brands;
‡ Figures are n (%) and include different drinks within a brand e.g. sweetened/unsweetened or flavoured.
§ Figures are n (%) and percentage is based on the number of brands for each matrix.

The iodine content of unfortified milk alternatives is largely unknown by their producers. Fortified soya drinks had an iodine concentration close to the value for UK summer cows' milk and thus could be considered a reasonable substitute. As the iodine content of unfortified milk alternatives is low, consumers should ensure adequate iodine intake from other sources. Laboratory analysis of the iodine concentration of milk-alternative drinks is required to provide accurate values for food tables.

Dr Bath was supported by an MRC Population Health Scientist Fellowship (MR/K02132X/1).

1. Food Standards Agency (2008) Retail Survey of Iodine in UK produced dairy foods. FSIS 02/08 Available at: www.food.gov.uk/multimedia/pdfs/fsis0208.pdf (Accessed: 11 October 2010).
2. Bates B *et al.* (2014) National Diet and Nutrition Survey, Results from Years 1–4 of the Rolling Programme.www.gov.uk/government/uploads/system/uploads/attachment_data/file/310995/NDNS_Y1_to_4_UK_report.pdf.
3. Mintel (2014) Available at: http://www.mintel.com/press-centre/food-and-drink/is-it-game-set-and-match-for-traditional-cream-at-years-wimbledon (accessed 16 July 2014).