

An extra glass of milk a day keeps the doctor away

Posted on Thursday 2nd June 2011

Collaborative research involving scientists from the University of Birmingham has revealed that more than two-thirds of UK teenage girls are iodine deficient, leading to calls for a simple diet change to combat the most common cause of mental impairment worldwide.

Iodine is an important component of thyroid hormones and deficiency has substantial effects on growth, development and cognition. Solving this potentially major public health problem can be helped by increased milk intake, with the research, published today in *The Lancet*, highlighting a link between low iodine levels and a decline in milk consumption.

The World Health Organisation (WHO)'s recommends a daily intake of iodine of 150µg. Seventy per cent of the 14-15-year-old girls assessed during the study had median urinary iodine concentrations of less than 100µg/l, indicative of mild iodine deficiency. It is especially important for women of child-bearing age to have sufficient levels as even a mild iodine deficiency can harm unborn babies, causing stunted growth, reduced IQ and mental impairment.

Co-author of the paper, 'Iodine status of UK schoolgirls: a cross-sectional survey', Dr Kristien Boelaert, from the School of Clinical and Experimental Medicine, explains: 'We found that median urinary iodine concentrations in 737 pre-pregnancy female participants, whose offspring will be most susceptible to the adverse effects of iodine deficiency in the short-medium term, were indicative of mild iodine deficiency.'

'Lower iodine concentrations were recorded in Belfast and lower urinary iodine content was independently associated with lower milk intake. Our findings emphasise an urgent need for a comprehensive investigation of UK iodine status and evidence-based recommendations on the need to implement a policy of iodine prophylaxis.'

The team concludes that the UK is now iodine deficient which is at least in part caused by a reduction in the amount of milk consumed by the population.

The researchers are calling for increased milk intake as well as looking to the successful model used in Australia and New Zealand to reverse iodine deficiency by implementation of the use of iodised salt; a cost-efficient method of increasing a nation's iodine levels.