

## THYROID FUNCTION

## Outcome of salt iodisation in India

In 1986, the government of India decided to iodise all edible salt to counter the high prevalences of endemic goiter, hypothyroidism and subcretinous mental retardation caused by iodine deficiency. After 10 years, a remarkable decline in goiter prevalence was observed, which was associated with a decrease in the number of individuals with low urinary iodine excretion and a notable improvement in IQ levels of schoolchildren.

Now, 20 years after implementation of the universal salt iodisation (USI) program, Marwaha *et al.* have re-evaluated goiter prevalence, thyroid functional status and autoimmunity in schoolchildren aged 5–15 years, in view of reports of a high prevalence of thyroid autoimmune disorders following USI in other parts of the world.

A significant further decrease in goiter prevalence and a reduction in goiter size were noted. “However, the persistence of endemic goiter despite normal iodine status does suggest a role for

other environmental and genetic factors and needs to be evaluated,” says lead investigator Raman K. Marwaha (Institute of Nuclear Medicine and Allied Sciences, Delhi). The role of iodine supplementation in the pathogenesis of thyroid autoimmunity remains controversial, as the present study showed no increase in thyroid antibody levels in children with goiter, when compared to levels of antibodies measured 10 years ago.

Of concern are the significant increase in the prevalence of thyroid dysfunction, particularly subclinical hypothyroidism, and in the prevalence of thyroid antibodies in children without goiter and normal iodine levels. These factors need to be monitored at 5-year intervals, to continuously evaluate the USI program.

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**Original article** Marwaha, R. K. *et al.* Thyroid status two decades after salt iodisation: country-wide data in school children from India. *Clin. Endocrinol. (Oxf.)* doi:10.1111/j.1365-2265.2011.04307.x