

AUTOIMMUNITY

Effect of an iodization program on thyroid autoantibody prevalence

Prevalence of thyroid autoantibodies increased after introduction of a cautious, mandatory iodine fortification program, report researchers as part of The Danish Investigation of Iodine Intake and Thyroid Diseases (DanThyr).

Presence of serum autoantibodies against thyroglobulin and thyroperoxidase are associated with autoimmune thyroiditis, but the effect of iodization programs on prevalence of these autoantibodies is largely unknown.

Bülöw Pedersen *et al.* measured the concentration of these two thyroid autoantibodies in serum samples from 8,219 people from Denmark. Two cross sectional studies were performed, one before and the other 4–5 years after the iodization program was introduced.

The researchers found a significant increase in the presence of both autoantibodies after iodine fortification. Increases in prevalence were most noticeable

in young women and especially observed at low concentrations of antibodies.

“It is possible that the increase in thyroid autoantibodies seen in the present study is a transient phenomenon with only a minimal effect on the thyroid function,” comments lead researcher Inge Bülöw Pedersen of Aalborg Hospital. “Another possibility is that the low concentrations of antibodies represent an early state of autoimmune thyroiditis.”

Bülöw Pedersen stresses that the team plans to continue the monitoring, as further studies are needed to evaluate the long-term effects of a small increase in iodine intake on thyroid autoimmunity in the population.

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Original article Bülöw Pedersen, I. *et al.* A cautious iodization program bringing iodine intake to a low recommended level is associated with an increase in the prevalence of thyroid autoantibodies in the population. *Clin. Endocrinol.* doi:10.1111/j.1365-2265.2011.04008.x