

Table S1. Operating mechanisms of food products on the thyroid or immune system.

Products/nutrition	Suggested mechanism of action and association with thyroid function.
Green vegetables	<i>5x/week for supper</i>
Vitamin A	Improves efficacy of iodine uptake and can have a beneficial impact on thyroid function and size ¹⁻³ . Modulates TSH production by influencing the expression of pituitary TSH β mRNA ⁴ .
Vitamin C	Improves iron-uptake, in persons with hypothyroidism, it improves the abnormalities in serum free T4, T3 and TSH concentrations ⁵ .
Zinc	Zinc levels are positively correlated with free T3-levels ⁶ .
Beef	<i>3x/week for supper</i>
Iron	Providing iron along with iodine results in greater improvements in thyroid function ³ . Both iron deficiency and iron excess can influence the functioning of the innate and adaptive arms of the immune system, thereby it contributes to a more stable thyroid function ^{7,8} .
Iodine	Chronic iodine deficiency increases the TSH concentration ⁹ .
Vitamin A, C, zinc	Stated above.
Selenium	Selenium deficiency impairs thyroid hormone metabolism by inhibiting the synthesis and activity of the iodothyroinine deiodinases, which convert T4 into T3 ¹⁰ .
Whole dairy products	<i>200 mL whole milk a day / whole butter on bread daily</i>
Vitamin D	Has a role in the maintenance of immune-homeostasis. Deficiency of vitamin D is linked to the presence of antithyroid antibodies and abnormal thyroid functions ¹¹ .
Fatty acids	Signs of faster immune maturation with supplementation ¹² .

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