

Iodine Supplementation and Metabolic Syndrome

Consumption of seaweed in amounts typical of the Japanese people may be associated with low metabolic syndrome prevalence.

Metabolic syndrome is characterized by a group of metabolic risk factors in one person. They include:

- Abdominal obesity
- Atherogenic dyslipidemia (high triglycerides, low HDL cholesterol & high LDL cholesterol)
- Elevated blood pressure
- Insulin resistance or glucose intolerance
- Prothrombotic state
- Proinflammatory state (e.g., elevated C-reactive protein)

People with metabolic syndrome are at increased risk of coronary heart disease and other diseases related to plaque buildups in artery walls (e.g., stroke and peripheral vascular disease) and type 2 diabetes.

Metabolic syndrome has become increasingly common in the United States. In fact, the incidence of metabolic syndrome is increasing worldwide, with the notable exception of some Asian countries where seaweed is commonly consumed.



A recent study examined the role of iodine in controlling the symptoms of metabolic syndrome.

Study participants were separated into two groups: Group 1 was given placebo for one month followed by 4g/day of seaweed for one month. Group 2 was given 4g/day of seaweed for one month followed by 6g/day of seaweed for an additional month. The study states that 4-6g/day of seaweed is typical for most people in Japan.

In Group 2, systolic blood pressure decreased 10.5mmHg after one month of 6g/day of seaweed. Waist circumference changed for female participants in both groups, but was more significant in Group 2 with a 2.1 cm decrease after 4g/day and a further 1.8cm decrease after 1 month of 6g/day of seaweed.

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What is the magic ingredient in seaweed? Iodine of course!

If your patient is dealing with metabolic syndrome, consider a 24 hour urinary iodine test to check for iodine whole body sufficiency.

If they are deficient in iodine, supplementation may be warranted.