

Reduce salt to one teaspoon a day and lead a healthier happier life

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Studies show that about two billion people get less iodine worldwide. Iodine deficiency leads to mental retardation. Even moderate iodine deficiency, especially in pregnant women and infants, lowers intelligence by approximately 10 to 15 IQ points. Severe iodine deficiency effects include disabling goiters, (16% of world's population have mild goiter, a swollen thyroid gland in the neck), cretinism, and dwarfism.

Unfortunately, Iodine deficiency disorders are still prevalent in our country according to the survey teams of different states and union territories.

Eminent scientists, program managers and administrators, after careful examination of scientific evidences and issues relating to safety of universal salt iodization, had recommended to the Government of India, to implement a policy decision, for universal salt iodization viz.; all edible salt in the country should be iodine fortified. This became a mandate for the national iodine deficiency disorders control program, which fixes the level of salt iodization to a minimum of 30 ppm at the manufacturer's level and 15 ppm at the consumer level.

Iodine is an essential dietary element required for the synthesis of the thyroid hormones, thyroxine (T4) and triiodothyronine (T3). Synthesis and secretion of T4 and T3 are under the control of the thyroid stimulating hormone (TSH) secreted from the anterior lobe of the pituitary gland. Dietary iodine deficiency stimulates TSH secretion that results in thyroid hypertrophy, occurring in a deficient supply of T3 and T4 hormones. The enlargement of the thyroid gland or endemic goiter is due to nutritional iodine deficiency. Iodine intakes consistently lower than 50 µg per day can result in goiter.

Normally food crops derive iodine from soil. However, crops and plants grown on iodine deficient soils leads to foodstuffs deficient in iodine. Similarly, regions with snowfall, heavy rains with frequent flooding are likely to be iodine deficient due to the washing away of the superficial soil layer where iodine is present. Deforestation and subsequent soil erosion further aggravates the problem of iodine deficiency.

National Institute of Nutrition, studies find that foods of animal origin have more iodine than plant foods. Fruits and vegetables have the lowest level of iodine content (2.7 to 20 µg per 100 g). Nuts and oilseeds have the highest amount of iodine (35 to 54 µg per 100 g) followed by spices (6 to 96 µg per 100 g) and condiments.

All types of foods in endemic districts have lower iodine content as compared to non-endemic districts. Iodine content in salt samples collected from different parts of

the country during the last one and half decade was less than 45 ppm, when analyzed using the standard iodometric titration method. The available scientific evidence indicates that the total intake of iodine through iodized salt and food in India is within safe limits and salt manufacturers are not over iodizing the salt as revealed otherwise, by some study data on urinary iodine excretion levels.

The existing universal salt iodization program, without doubt is thus leading to a good reduction in iodine deficiency disorders in endemic population groups of our country.

Nowadays, we find misleading advertisements and messages circulating on E-mails claiming that rock and sea salts are natural and so healthier. Rock salt that has a pinkish color and a nice sulphurous odor is 95-98% sodium chloride, with minor proportion of other minerals. Sea salt composition on the other hand is sodium (~55-56%) chloride (~30-31%), Sulphates (~7-8%), Magnesium (~3-4%), Calcium (~1%), Potassium (~1%), along with other minor constituents like bicarbonates (~0.40%), bromide (~0.2%), borate (~0.08%), Strontium (~0.05%), etc.

Table salt on the other hand is refined and purified having almost 99-100% sodium chloride. Uptake of iodine is more efficient if the salt used is refined. Purified salt is thus necessary, to improve iodine intake that is more important and essential to prevent iodine deficiency disorders.

Rock and sea salts are significantly no different from ordinary table salt. All of them have sodium chloride as the major chemical content and excess sodium intake causes harm. Frankly speaking, people eat too much salt, far more than the recommended guideline, i.e., one teaspoon a day.

Diet with high salt content leads to high blood pressure, risking a stroke, and heart failure. All salt brands majorly contain sodium chloride that is damaging to health equally when consumed in large quantities.

Claiming rock and sea salts are healthier as it contain essential minerals are only confusing the public making them needlessly spend more money on 'premium' salt, also making them consume more or inadvertently forcing them to use unrefined sea salt that may also contain harmful pollutants.

Reducing salt consumption in my opinion is the cheapest healthiest option. Stop adding extra salt to food altogether and lead a healthier happier life.