



Brief Note on Functions of Iodine and its Sources

Wenshi Thorpe*

Department of Nutritional Sciences, University of Surrey, Guildford, United Kingdom

DESCRIPTION

Iodine is a mineral required for a functioning thyroid. Eggs, dairy products, some plant foods as well as a wide range of seafood all contain iodine. Along with naturally available foods fortified sources can provide iodine [1]. It is typical to use iodized salt. An appropriate iodine intake is necessary for a healthy thyroid. The thyroid regulates hormones, metabolism, the condition of the nervous system and other things. The effects of iodine shortage on one's health. Women who are pregnant are especially susceptible to deficits [2]. Iodine is a mineral that is crucial for maintaining thyroid health. People may suffer from conditions like weight gain, extreme fatigue, hair loss, dry skin and cognitive impairment if their iodine intake is inadequate [3]. Some individuals mistakenly believe that sodium and iodine are interchangeable due to the mineral's inclusion in iodized salt. This is untrue though. Many common salts like sea salt and pink Himalayan salt don't contain iodine. Traditional table salt is available with and without iodine.

Numerous body processes including metabolism, bone health, immunological response and Central Nervous System (CNS) developments are significantly influenced by thyroid hormones. Triiodothyronine (T3) and thyroxine (T4) are produced from Thyroid Stimulating Hormone (TSH) and iodine respectively. The thyroid needs to undergo this change in order to operate properly [4]. The thyroid may become overactive or underactive as a result of an iodine deficiency. The thyroid gland in the neck contains 70 % to 80 % iodine. The remaining substances are found in the body's blood, muscles, ovaries and other organs [5]. Because salt is iodized in Western countries, iodine deficiency is uncommon. Iodine deficiency still poses a risk to an estimated 2 billion people globally and 300 million people worldwide experience thyroid gland dysfunction.

Sources of iodine

Seaweed: Approximately 232 micrograms of iodine are present naturally in seaweed per meal. That exceeds the Recommended Daily Intake (RDI) of 150 mcg for men and non-pregnant

women. Because of its capacity to absorb concentrated iodine from the water, seaweed has high iodine content.

Fish cod: Seafood contains substantial amounts of iodine. However, cod contains a very high amount of this essential mineral. The amount of iodine in one serving or three ounces (oz) of cod is about 158 mcg which satisfies the RDI for most persons. The body of water the fish lives in determines how much iodine cod has. Fish from the Norwegian Sea for instance contained more iodine than Atlantic cod from the North Sea.

Halibut: Another fish with a lot of iodine is halibut. Each serving of Atlantic halibut has roughly 21 mcg of iodine. Despite being less than some other fish, it nonetheless offers a significant amount of iodine.

Fish pollock: A member of the cod family that frequents the chilly North Pacific seas is Pollock. Iodine content in an Alaskan Pollock serving of 120 grams is 67 mcg or roughly half the RDI. Additionally, it includes niacin, phosphorus, selenium and omega-3 fatty acids all of which support the health of the immune and brain systems.

Crab: Despite having less iodine than other shellfish, crab nevertheless has 26 mcg to 50 mcg per 100 g. Crab is a fantastic protein source but it also contains many other essential elements. It offers zinc, B12 and selenium.

Those who consume low-sodium diets and pregnant women are especially at risk for iodine deficiency. Long-term thyroid issues could arise if don't get enough iodine each day. A lack of iodine can cause goitre, hypothyroidism and pregnancy difficulties.

Iodine intake that is too high might also be harmful. Thyroid cancer and thyroid gland inflammation are linked to an iodine-rich diet. A high-iodine diet can harm over time. An extremely big serving of iodine consumed all at once can also cause temporary discomfort. A person may have fever, nausea, diarrhea, stomach and mouth burning. To avoid getting too much iodine, people who use iodine supplements should make sure the supplement only includes the RDI or less.

Correspondence to: Wenshi Thorpe, Department of Nutritional Sciences, University of Surrey, Guildford, United Kingdom, Email: wenshi@rpe.ac.uk

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