

Mineral Iodine and Thyroid Hormone

Iodine is a mineral which the body requires for making Thyroid hormone. It is an essential hormone for vitality, energy, and growth. Low level of Thyroid hormone reduces metabolic rate leading to weight gain and decreased energy. In infants, low thyroid hormone causes impaired brain development called Cretinism. The thyroid gland, which makes the hormone lies in the front of the neck in the proximity of the windpipe. Iodine is critical to the synthesis of thyroid hormone.

The daily requirement of iodine is minimal of 100 to 150 mcg. Cooking processes such as boiling, frying, and baking reduce the iodine content of food by 30-50%. The iodine in the diet comes from the soil. There are many geographic areas, especially along the foothills of Himalaya where the soil is deficient in iodine. Enlargement of the thyroid gland in the front of the neck; called goiter is common in the populations who live in these low iodine geographic areas.

Iodine fortification of salt

The primary source of iodine for the most population in India is cooking salt fortified with iodine. National Institute of Nutrition (NIN) in Hyderabad has developed a double fortified preparation of salt-rich in iodine as well as iron. NIN did design mineral and vitamin-fortified salts such as Puro and Health salts. Unfortunately, these healthy salt options are not widely available, possibly because of market competition by refined salt companies.

Iodine rich foods

- The most reliable source of iodine for vegetarian Indians is iodine fortified refined salt. A half teaspoonful of this fortified salt will provide the daily requirement of iodine. If the daily added salt requirement is higher than this than it may be good practice to combine refined fortified salt with unrefined natural salt in equal proportions to minimize sodium intake.
- Seaweeds (Japanese and Chinese diet)
- Seafood especially shellfish
- Yogurt and curds (Dahi)
- Egg yolk
- Lima beans
- Prunes/ dark raisins(munakka). These are high glycemic, so limit these to 2-3 pieces.