

## **Iodine – a vital substance for good health**

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*The importance of iodine and its impact on our lives: why we should consume iodine, what kinds of food contain iodine, the consequences of its deficiency in human body is presented in the article.*

Iodine is a naturally occurring element found in sea water and in certain rocks and sediments. It was discovered by Bernard Courtois in 1811. At one time, iodine was literally a magic medicine. It was always used for infections, for pneumonia, lack of it considered to be the cause of mental slowness and even today, iodine deficiency is considered to be the most common cause of preventable brain damage in the world. Iodine as an hormone which regulates the production of energy, maintains constant body temperature, breath and muscle tone and ensure the health of skin, hair and nails.

Iodine is essential to human life. Under normal circumstances, your body contains approximately from 20 to 30 mg of iodine, most of which is stored in your thyroid gland, located in the front of your neck, just under your voice box. Smaller amounts of iodine are also found in lactating mammary glands, the stomach lining, salivary glands, and in the blood. Without sufficient iodine, your body is unable to synthesize these hormones, and it can have a devastating impact on your health and well-being [1].

20 percent of all iodine in the body is stored in the skin, specifically in the sweat glands. Lack of iodine in the sweat glands manifests as dry skin with a decreased ability to sweat. Iodine also concentrates in the stomach and a lack of iodine there manifests as achlorhydria (lack of stomach acid production).The lachrymal glands of the eye use iodine to help create tears, when iodine is in short supply, dry eyes result. Iodine is also used by the sub-mandibular glands of the mouth; lack of iodine can result in dry mouth. Several studies found that adequate iodine supplementation reversed this condition within a few months.

It is interesting to note that Japanese women living the traditional lifestyle and eating traditional food will often consume from 50 to 80 mg of iodine daily. These women have the lowest rate of breast cancer in the world! There are numerous studies showing the importance of iodine in the period of pregnancy. It helps not only the mother's thyroid work better, but serves specifically for the cognitive and neurological development of the child [2].

However, in certain circumstances, excessive consumption of iodine can actually inhibit the synthesis of thyroid hormones, thereby leading to the development of goiter (enlargement of the thyroid gland) and hypothyroidism. Excessive iodine intake may also cause thyroid papillary cancer, and iododerma (a serious skin reaction). Iodine deficiency is a major cause of breast cancer and other diseases of the reproductive organs such as ovarian [3].

The amount of iodine found in most natural food is typically quite small and varies depending on environmental factors such as the soil concentration of iodine. Some of the richest food sources of iodine are often processed foods that contain iodized salt, and breads that contain iodated dough conditioners. Sea vegetables are an excellent source of iodine. Yogurt, cow's milk, eggs, and strawberries are very good sources too. Good sources include mozzarella cheese. Fish and shellfish require their own special category when it comes to iodine content, because the amount of iodine they contain is not always easy to predict [4].

So, as we see, iodine has a great impact on our lives and we should take care about our health. Our mind and our health are in our hands.

### **Bibliography:**

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