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Health Options
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Saturday, July 26, 2008

We all need the essential mineral iodine

In Hawaii we are surrounded by the world's greatest source of iodine: the ocean. It should be easy to get enough of this nutrient, but cases of deficiency do occur.

Question: What is iodine and what does it do?

Answer: Iodine is an essential mineral in thyroid hormones produced by the thyroid gland. This hormone has many functions but is best known for regulating energy production and metabolism. Normal thyroid hormone production also is extremely important during fetal and infant growth.

Q: What happens if iodine is too low in the diet?

A: The small thyroid gland in the neck will enlarge in an attempt to capture every bit of iodine available. As an iodine deficiency persists, thyroid hormone levels in the body decline, resulting in hypothyroidism. Symptoms can vary greatly from one person to another but usually include poor tolerance of cold, tiredness, weakness and possibly weight gain.

During a long-term iodine deficiency, the thyroid gland can enlarge greatly. This "goiter" can become quite noticeable and start to look like someone has a golf ball in their throat.

Iodine deficiency does its greatest damage during pregnancy and early infant development, when lack of iodine impairs nerve development and causes mental retardation and a severe condition called cretinism.

Q: Do some foods affect iodine needs?

A: Yes. Some plant foods contain "goitrogens" that interfere with thyroid hormone production or function. These foods include vegetables from the cabbage family (kale, cabbage, sprouts, broccoli, etc.) lima and soy beans, flaxseed, millet, bamboo shoots, sweet potatoes and poorly processed cassava root. Generally, none of these foods cause problems unless iodine intake is too low.

Q: What foods provide iodine?

A: A simple list of the iodine content of foods can be misleading for many reasons. The iodine content of plant foods depends on the iodine level in the soil where they are grown. To complicate matters further, iodine can be lost in cooking and can vaporize from foods over time. Iodized salt stored at 80 or 90 percent humidity can lose virtually all of its iodine within a month of opening the container.

Milk has typically been a good source of iodine, due to the use of iodine-containing sanitizers. But milk contains little iodine when a dairy uses other practices.

The most consistent iodine sources are seafood and seaweeds. Sea salt, however, is actually very low in iodine.

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