Sea Vegetables and Radiation

Researchers in many parts of the world have investigated sea vegetables’ effectiveness in treating radiation and heavy metal poisoning, both as a preventative and therapeutic agent. Fighting radiation poisoning with seaweed was first investigated 30 years ago at McGill University in Montreal, Canada.

Scientists found that alginic acid, an important intercellular polysaccharide found in large brown algae like Kelp and Alaria, could significantly reduce the amount of radioactive strontium-90 absorbed through the intestinal wall. 5-6

Further, researchers at the U.S. government’s EPA Environmental Toxicology Lab found that alginates (from kelp) could bind and eliminate both radionuclides such as strontium-90 and heavy metals pollutants such as cadmium in the gastrointestinal tract. These bonds resisted enzymatic or intestinal bacterial action so that the toxic material passed safely out of the body. 7

This group also discovered that strontium-90 was re-secreted from the bones into the intestinal tract. At that point the alginates bound the toxic pollutant which was then excreted in the stool. 8

After the Chernobyl nuclear disaster in Russia we noticed an increase in our sales of Kelp. We also joined with other small producers in sending a kelp care package to survivors. We subsequently learned that the Russians have been seriously researching the use of their kelps from Vladivostok, from which they have isolated the polysaccharide U-Fucoidan, an apparently excellent internal absorber of radioactive elements.

References:

For more info visit our website: www.seaveg.com
Sea Vegetables and Iodine

Iodine is the main component of the hormone produced by the thyroid gland, which regulates our energy metabolism, accelerating cellular reactions, increasing oxygen consumption and basal metabolism. It also influences protein synthesis, growth and development.

Dr. Ryan Drum, Ph.D., noted herbalist and sea vegetable gatherer, states “Seaweeds, eaten regularly, are the best natural food sources of biomolecular dietary iodine... no land plants are reliable sources of dietary iodine.”

For comparison, you would have to eat about 40 lb. of fresh vegetables and/or fruits to get as much iodine as you would from 1 gram of Maine Coast whole leaf kelp.

Dr. Linda Rector Page, author and herbalist, writes “Iodine is essential to life... it is an important element of alertness, and rapid brain activity, and a prime deteriorant to arterial plaque. Iodine is also a key factor in the control and prevention of many endocrine deficiency conditions prevalent today, such as breast and uterine fibroids, tumors, prostate inflammation, adrenal exhaustion, and toxic liver and kidney states.”

Unfortunately, not all iodine is good for us and the human thyroid cannot distinguish between life sustaining iodine-127 and the highly toxic pollutant radioactive iodine-131.

On this subject Dr. Ryan Drum informs us that “…we are regularly taking in radioactive isotopes from the total world contamination by continual radioactive fallout from all nuclear power plants, weapons facilities and past nuclear ‘tests’.”

He further warns, “The real reason for making sure that iodine consumption is at the high end is to insure a full body complement of iodine at all times as preventative medicine against the next nuclear disasters [whether from intentional radioactive pollution as the result of armed conflict or terrorism, nuclear power plant failures, or industrial contamination]. A full body load of iodine-127 from seaweed (or any source) will tend to allow the body to reject topical and air and food-source iodine-131, particularly from fresh milk.”

In general, brown sea vegetables (kelps) offer more bio-available organic iodine than red sea vegetables (dulse, laver, and nori). Maine Coast Sea Vegetables’ whole leaf kelp (Laminaria longicurris) has approximately 450 mcg. (micrograms or parts per million) iodine per gram. Our powdered kelp (Laminaria digitata) has even higher amounts, about 5000 mcg. In comparison, Dulse contains 50 mcg per gram. These amounts vary depending on season of harvest and the age of plant. Dr. Ryan Drum recommends consuming sea vegetables as powder or in pieces mixed with other foods to maximize intestinal absorption.

Finally, a cautionary note about getting too much of a good thing. The RDA for dietary iodine is 150 micrograms, the minimal amount necessary to keep our thyroids healthy and mitigate uptake of radioactive iodine. Most of us can ingest much greater amounts - and perhaps should - and our healthy thyroid glands will "spill" unneeded iodine. But some people with sensitive thyroids (some nursing mothers, postmenopausal women, or anyone with an unusual thyroid dysfunction) may have adverse reactions to excess dietary iodine. Most often if you decrease the intake of dietary iodine the reaction goes away. Sea vegetables such as Dulse, Laver, Nori, Alaria and Bladderwrack with lower concentrations of iodine may provide a good alternative. Please, consult with your health care practitioner with any questions about your consumption of iodine.