Natural Ways to Protect Yourself from the Possible Exposure to Radiation from Japan

As we all know, the world is experiencing a very real situation of radiation exposure, one that has the potential to have serious health consequences. Many of my patients have been asking my opinion on the need for early preventative care, and what my recommendations are.

Firstly, I think it is important to keep our cool. No one wants to start a global scare. However, it is important to educate yourself to understand the real situation we are in, and keep a track of what is happening around the world. There is a lot of misinformation out there on the dangers of this radiation. How much of this information is being held back? It is each person's individual decision to either start early preventative care now, or wait until the radiation reaches our coasts.

The information I am presenting to you today is not my information. It is a summary from the material that has come my way and from research I have done. I have made the personal decision to start protecting me and my family now. I wanted to pass this information along to you in a usable format. For those seeking some information on guidelines, I hope you find this useful.

Most of the information presented here comes from an excellent report available at http://doctorapsley.com/RadiationTherapy.aspx

Important Dates:

- March 11 2011: Japan declared a nuclear emergency after several nuclear power stations are hit by the tsunami
- March 15 2011: Major radiation release after nuclear reactor explosions. Radiation levels high enough to harm human health were detected around Fukushima
- Mar 19, 2011 Japan's health ministry reported that radioactive iodine-131 and caesium-137 had been detected in milk and leafy vegetables such as spinach near the Fukushima plant, as well as in tap water
- Mar 22, 2011 Austria's Central Institute for Meteorology and Geodynamics estimated that Fukushima was emitting radioactive caesium-137 and iodine-131 at levels approaching that of Chernobyl

- Mar 25, 2011 Japan's science ministry detected radioactive isotopes in surface seawater near Fukushima. At a site 30km off-shore, they measured abnormally high levels of iodine-131 and caesium-137.
- March 25 2011: Radiation from the Japanese nuclear reactor damaged in the March 11 earthquake and tsunami has been detected in B.C. seaweed and rainwater samples. Tests found iodine-131 in samples taken in the Lower Mainland on March 19, 20 and 25, say researchers from Simon Fraser University
- March 26 Levels of radioactive iodine in the sea near the Fukushima nuclear plant are eight times higher than a week ago.
- March 27 The radiation levels are so high, that emergency workers near the contaminated water would have received four times their maximum annual dose of radiation in just one hour.
- March 28 Highly radioactive water has been found for the first time outside one of the reactor buildings at Japan's quake-hit Fukushima nuclear plant, officials say.
- March 29 Japanese Prime Minister Naoto Kan has said his government is in a state of maximum alert over the crippled Fukushima nuclear plant.
- March 30 Seawater near Japan's crippled nuclear reactors is said to have a much higher level of radioactive iodine than previously reported. Highly radioactive liquid has been found inside and outside several reactor buildings. Plutonium has also been detected in soil at the plant - the latest indication that one of the reactors suffered a partial meltdown.
- March 31 Nuclear safety officials said on Wednesday that radioactive iodine in seawater outside the plant was 3,355 times more than the normal, a sign that contaminated water was leaking into the ocean.
- April 2: Highly radioactive water was found leaking into the Pacific Ocean from a crack at 6-reactor power station. The same day, 9,000 tons of wastewater containing low-level radioactive material is dumped into the Pacific to free up space for the even more contaminated water that has been leaking into the sea.

Question we must ask ourselves: Do we rely on the messages we are getting, telling us that there is no risk of contamination in BC, or do we start to take precautionary measures in the event this radioactive material reaches our seawaters, rainwater and food? This is the individual question we must ask:

What radioactive metals do we have to worry about?

"The radioactive metals uranium, plutonium, cesium and strontium are of primary concern, right alongside radioactive iodide. Once lodged into our tissues, all will induce lethal tissue ionization, which over decades will derange genetic functions and kill many cells. To avoid this, the metals need to be removed from the cells. Specifically over the long term, radioactive cesium will concentrate in the **fatty tissues**, radioactive iodine in the **thyroid gland** and **ovaries**, strontium and uranium in the **bone**, and uranium and plutonium in the **liver**.

The information provided is not intended to diagnose or treat any health condition. Please consult with your doctor or naturopathic doctor before starting any new supplement program as they may have interactions with certain medications. Many of these herbs increase circulation. You have to be cautious if you are taking certain medications that also affect blood flow such as blood thinners, heart medications or blood pressure medications.

Supplements recommended:

1. N-Acetyl-Cysteine (NAC) is the most powerful short term quencher of ionizing radiation. It is a nutrient, a simple amino acid from protein.

- For adults (weighing above 150lbs), it may be taken in dosages of 500mg to 600mg daily for protection from toxic metals and other poisons.
- For younger adults weighing 100lbs to 149lbs, 400mg to 500mg daily affords adequate protection in most situations.
- In children weighing less than 100lbs, but above 50lbs, 200mg daily is a suitable dose.
- For infants, toddlers or children weighing less than 50lbs, 50mg to 100mg daily may be used in juice, as long as no sensitivity to NAC arises (i.e., light skin rashes).

In this manner, NAC may be used daily on an indefinite basis, as it is a harmless amino acid our bodies will use to establish antioxidant defenses and aid the immune system. It is also an adequate remover of toxic metals from the body, such as radioactive cobalt and directly and indirectly uranium.

2. **Iodide** is also a first line of defense mineral supplement, since it can out-compete radioactive iodide from entering into our bodies. Kelp and other seaweeds are also excellent chelators of toxic metals from the body, especially if high fiber intake is also being incorporated into the diet.

lodide is a form of iodine. Iodine is essential for your thyroid and several other tissues and organs. Your thyroid needs it most. So, your body has a heavy concentration there. If you're deficient, as most Americans are, your thyroid will pick up any iodine your body ingests. This includes radioactive iodine, which can poison your thyroid.

On the other hand, if your thyroid is sufficient (full) of iodine, it will ignore any other iodine passing by — including radioactive iodine. Iodide and iodine serve slightly different roles in your body. They each protect different organs in different ways. So in the event of nuclear fallout, it's vital you protect your body with iodine.

Get Your Protective lodine from Food

I do not have enough clinical experience with recommending iodine, in the form of tablets or drops, to healthy individuals with no thyroid problems. There is a risk of aggravating a subclinical thyroid problem (or Hashimoto's thyroiditis) by supplementing with iodine in susceptible people. Therefore, I recommend getting your iodine from food.

Kelp contains iodine and the main nutrients essential for interactions with iodine, selenium, zinc, and iron that allow iodine to function properly in thyroid metabolism. Just Kelp is a great product available at Ultimate Products For Life (604-541-6111).

Numerous seaweed in addition to kelp are also loaded with iodine, and its main interactive nutrients. You can add 20 grams of several different whole seaweeds to your daily diet. The main kelps sold as food are, Fucus, Sargassum, and Hiziki. The main red seaweeds are Dulse, Nori, and Irish moss. You can eat seaweeds in soups, or salads; or crumbled and sprinkled onto any food as a condiment. For a potent intake of iodine do not cook the seaweed. Best is untreated, dried, raw seaweed, in pieces, not reconstructed flakes or granules.

[SPECIAL NOTE # I: Most individual tablets of (1) Kelp, (2) Irish Moss or (3) Dulse regardless of brand - contain 200mcg of iodine, plus or minus 50mcg. Each single tablet provides the minimal unit of which is an acceptable starting dosage of intake for all, providing no sensitivity to iodine is present. After all, these are simply tablets of sea vegetables, which have been consumed by human beings for millennia].

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[SPECIAL NOTE # II: When sensitivity to iodine is an issue, and Vitamin C does not calm the sensitivity, substitute the more expensive green-algae Chlorella (cell-wall cracked) or the lesser expensive blue-green algae Spirulina to safely intervene against radioactive Fall-Out].

3. Potassium is supposed to protect you from radioactive cesium. Take in the form of Potassium iodide

4. Chlorella is a blue green algae that is a superior protector and *chelator* of radioactive metals from the body. Advanced Bionutritionals has a great chlorella called King Chlorella.

5. Calcium: **Calcium & Strontium Hydroxyapatite** will also protect against radioactive strontium poisoning and penetration of uranium into bone. 3 per meal as labeled is suggested for adults, young adults and children, and 1-2 per meal for the very young.¹²

Strontium 90, a radioactive mineral, is a more difficult issue. It is chemically similar to calcium and can wind up in your bones. Since EDTA can chelate calcium, it would make sense that it would also grab strontium. And studies suggest it does. For strontium 90, consider both oral and rectal EDTA, which may offer limited protection. If you are exposed to radiation, I'd go directly to intravenous EDTA under the care of a trained chelation doctor.

6. **ANTIOXIDANTS:** Krill oil is a powerful antioxidant. Antioxidants are important to protect your cells from the dangerous oxidative effects of radioactive materials. Other great antioxidants include Vitamin E (800IU of mixed tocopherols per day), Co Q10 (100 mg daily) or melatonin (3-6 mg at night). **Krill oil** is *300 times more powerful* than vitamin E and *34 times more powerful* than CoQ10 for reducing free-radical damage, mainly to cellular lipid membranes in the body.

Recommendations directly from http://doctorapsley.com/RadiationTherapy.aspx

A. NAC (as above);⁶

B. Chlorophyll (found in sea vegetables, and richest in Chlorella or Spirulina - 5 per meal for adults)

C. cRFsTM - As found in Chlorella, Spirulina and organic organ meats such as liver, spleen and thymus in freeze-dried form.

D. Krill oil or Vitamin E Complex (including delta and gamma tocopherols and tocotrienols taken as above). **Krill oil** is <u>300 times</u> <u>more powerful</u> than Vitamin E and <u>34 times more powerful</u> than CoQ10 for reducing free-radical damage, mainly to cellular lipid membranes in the body

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E. Lipoic acid as R-alpha lipoic acid (100mg three times daily for adults, 100mg daily for young adults and children, 25mg - 50mg daily for the very young⁷

F. Melatonin (1mg to 20mg at bedtime for adults, \leq 1mg to 3mg for children and young adults respectively);⁵

G. Reduced CoQ10 or Ubiquinol (100mg daily for adults, 50mg per day for smaller adults and children, 25mg daily for the very young);^{7, 21} **H.** Vitamin C and Quercetin (1,000mg three times daily and 100mg three times daily respectively);^{7, 21}

I. Organic Selenium as selenomethionate or when grown into kelp or other foods (400mcg - 600mcg daily for adults, 200mcg - 400mcg daily for young adults, 200mcg daily for children, 50mcg - 100mcg daily for the very young).

J. Probiotics (1 per meal) + high-grade Aloe (1 ounce of liquid taken with each meal)

I hope this information is useful to you and your family. Again, educate yourself, make the decision to start taking steps to protect yourselves. I hope that this worldwide disaster does not end up with the potential devastating consequences some predict and that, in the end, we are all safe from the Fukushima disaster.

Yours in health, Dr Tasreen Alibhai, ND