

## **Protecting Yourself From Radiation**

By Michael Mooney, April, 2011

With Japan in turmoil over its nuclear reactor disaster, more and more people in West Hollywood are scared and confused about radiation from Japan reaching us here in paradise.

Cow's milk in Washington has shown measurable radiation that can be traced to Japan and even though the amounts so far are not enough to cause much concern, there is a concern about it. For some, it's creating panic, which has many thinking about taking high-dose potassium iodine to protect the thyroid from radiation that can cause thyroid cancer.

What high dose potassium iodine does is fill the thyroid with iodine so that radioactive iodine from the reactor leaks will be blocked from getting in the thyroid and causing cancer. Thyroid cancer was the biggest negative health impact from other nuclear disasters, like Chernobyl. Over 6,000 Russian, Ukrainian and Belarusian children at the time of the disaster were diagnosed with thyroid cancer as of 2006, the disaster's 20<sup>th</sup> anniversary.

Health stores in West Hollywood, like Capitol Drugs and Whole Foods Market have reported a run on iodine-containing supplements, like high dose potassium iodine and sea kelp iodine.

While Capitol Drugs has high dose potassium iodine in stock today, they are out of sea kelp iodine tablets. Whole Foods Market, on the other hand has sea kelp iodine but does not have high dose potassium iodine, which is typically a drug store item. A trip between the two stores takes all of five minutes, so in short order you can have both products. But there is a misunderstanding about sea kelp iodine.

The small amount of iodine gotten from sea kelp tablets is far too little to adequately protect our thyroids from radiation if we get the word that we should take high dose iodine because dangerous amounts of radiation have been detected in the air or in our food supply. So while it sounds like it would help, taking sea kelp iodine for this purpose is like using a BB gun to hunt bears.

But to be clear - high dose potassium iodine should be a last resort, only taken when we are given the radiation alert. The Recommended Daily Value for iodine as an essential nutrient is 150 micrograms and that's what you'll get from most sea kelp tablets. For radiation protection the suggested dose can be as high as 65 milligrams, which equals 65,000 mcg, a whopping high unnatural amount, taken no more than once a day.

Does this ultra-high dose sound like it might cause problems? Well, it can cause side effects, like hair loss, thyroid swelling, hypertension and water retention. That's why taking it should only be considered to be a last resort.

And realize that iodine only protects the thyroid. It does not protect the rest of the body from radiation poisoning.

So is there anything you can do besides taking a huge dose of potassium iodine?

### **Study Says Two Antioxidants Can Reduce Radiation Damage**

[A new study](#) looked at radiation from scanning devices, like CT-Scans and X-rays and asked the question whether taking specific antioxidants can reduce the damage to cells that radiation causes.

The study was presented at the Society of Interventional Radiology's 36th Annual Scientific Meeting in Chicago, Illinois this year, the first clinical trial of its kind. It found that you can reduce the potential for radiation injury to the entire body by as much as a 50 percent if you take specific antioxidants before being scanned.

The radiation from X-rays collides with water molecules in our bodies to create dangerous free radicals, which then cause cell damage that can result in cancer.

Antioxidants neutralize free radicals, so the researchers looked at antioxidants that anyone can buy in an effort to tell us how to easily reduce the risk of cancer from radiation exposure over a lifetime.

The study only looked at two antioxidants you can buy in health stores, vitamin C and glutathione, which is produced in the body when we take N-acetyl cysteine (NAC). (NAC is easier to find as a supplement that you can buy in a health store than glutathione.)

Other antioxidants might help protect even more, but research is needed to determine which other antioxidants would work best.

For now, the short list of supplements recommended to reduce the potential for radiation damage that can be caused by being scanned is 1,000 mg of vitamin C and 600 mg of N-acetyl cysteine (NAC) taken three times during the day before being scanned and during the day of scanning.

For our purpose, taking these two antioxidant supplements every day is an easy way to help reduce the potential damage that radiation fall-out might cause us here in West Hollywood.

And just to make a complete statement, consider that taking antioxidants, in general, can offer some protection from the radiation that's drifting here from Japan that might increase the rate of cancers we experience over the next few dozen years.

Even though I do have 65 mg high dose potassium iodine to take if the public health radiation alert is given, as a matter of course, I take a variety of antioxidants every day for overall good health. Now I have one more reason to take them.