

How to Protect Yourself from Possible Radiation Exposure

In the aftermath of the Japanese earthquake, tsunami and nuclear crisis, many of you have asked me for advice on what to do to protect your self from possible radiation exposure and where to find accurate information.

Taking Control

First of all I want to encourage you to continue with all your healthy habits that are protecting you; and if you haven't been taking good care of yourself then start now. Take control of the things that you can. You can clean up your diet. You can get more rest. You can find an exercise that works for you. You can experience joy. Being prepared is how you can best protect yourself; your body wants to do this and the best way to do this is through a diet that filled with antioxidants. These are the clean up crews in your body and they are represented by the colorful foods such as green kale and orange carrots.

In Chinese Medicine we respond to the seasons and change our diets and activities accordingly. We are at the spring equinox right now and this is an unusual and special time of year as it happens but once a year. At the spring equinox the Yin and Yang are equal i.e. 12 hours of day and 12 hours of night. In [Chinese philosophy](#) this is the recalibration of the earth, the reset button is hit and the agriculture year begins with the first new plants coming up in the fields. If we were following traditional Taoist habits we would start something new, anything, it doesn't really matter what as long as it interests you and you can be "fresh" and lighthearted with it. Embrace something instructive, fun, read a history that ends well. This is not a good time for harsh judgments.

For me today, that new activity is writing this newsletter. I have learned so many new things in the last week and have thought widely about this current situation on [Mother Earth](#). If we have been pushing ourselves and using stimulants there is the danger that we can seriously damage our chi, this will be hard to reverse. What do we need to cultivate in our life that will lead to

regeneration? The fields have been resting all winter; and now is the time to plow.

I am going to discuss 3 areas that can help you to feel more confident that you can take the best care of yourself at this stressful time.

1. How do I take care of myself in the event of exposure to nuclear radiation?

Let's talk about food. Meals can help recalibrate us. In an obvious way a meal gives us energy but on a subtle level it can be deeply healing. Now the one thing that is clear from all the discussion and study I've done this week is the way we can protect our thyroids from **radioactive iodine**, which can lead to **thyroid cancer**, is by having a diet that naturally supplies our bodies with iodine. Iodine is an essential nutrient that comes from seafood, sea plants, milk and eggs. Now radioactive iodine is only one of several radioactive substances and iodine will only protect our bodies from radioactive iodine. The best cure all system that we have in our bodies is our antioxidant system. Let's look at where to find antioxidants in food.

Miso and other fermented foods have been documented to help the body eliminate toxins from radiation as well as toxins that we normally generate in the process of living. This means miso is an antioxidant food. It is used as an anti cancer food. Other fermented foods, fresh sauerkraut, kim chi, tempeh, yogurt, kefir, fresh pickles are all used like condiments not as the only food eaten at a meal. Here is where looking at traditional recipes as a guide is helpful. If you are eating a bowl of stew or soup you can put a spoonful of miso or sauerkraut in the bottom of the bowl before you scoop the stew or soup into the bowl. This way the live beneficial bacteria will not be destroyed by being boiled. And you'll get the antioxidant properties of the fermented food.

Shitake, Oyster, Reshi , Turkey Tail and Lion's Mane are all medicinal mushrooms, anti oxidant, anticancer and detoxifying. If you are cooking with mushrooms they must be cooked at least 30 minutes so that the cell walls are broken down and its medicinal

qualities can be absorbed by the body. Again these are used as condiments or as part of many elements in the dish.

Seaweed, especially brown kelp which are found dried in Asian grocery stores are high in iodine, vitamin C and other minerals. These are Kombu, Wakame, and Bladderwack seaweeds. Look for seaweed that is gathered from clean ocean areas. One square inch of Kombu, instead of salt, cooked into a pot of rice will provide a good dose of vitamin C and iodine. Too much seaweed will create cold in the body so do not over-consume.

Fiber helps to detoxify by binding with what the body needs to eliminate and escorting it out of the body through the large intestines. Drinking enough water helps the body remove toxins through the kidneys

All the colorful fruits and vegetables are filled with numerous anti oxidants. Vitamins A, C, E, caroteinoids, [essential fatty acids](#) are all antioxidants.

Here's a simple recipe to try- : Spring Time Miso Soup"

Ingredients: 1 [yellow onion](#), 4 cups water, 1 bunch fresh green garlic (bulbs and greens), 1 small piece of kombu seaweed, 1/2 lb shitake mushrooms, olive oil, [miso paste](#), sea salt.

Preparations: Cut onion and mushroom in a fine dice. Heat pan, add oil and sauté onions, mushrooms and sea salt until soft and almost translucent. (30 minutes) Cut green garlic bulb and green into fine slices and add to onion sauté and cook until aromatic. Add water, rinsed kombu and let simmer. (10-20 minutes) Remove from heat and serve.

Serving Instructions: Put a teaspoon to a tablespoon of miso paste into a bowl. Add a small amount of broth to the miso and combine until it's the consistency of thick cream. Fill the bowl with more broth. Garnish with a few drops of toasted sesame oil or sake.

Enjoy

Note: Miso paste is very salty so use it sparingly to start.

2. **Where to find the most accurate information on the web?**

I always look to those experts and organizations who have the most credibility and who have provided solid information in the past.

Helen Caldecott, MD is a noted scientist who has studied the nuclear industry for over 30 years. She recently wrote a very good editorial on the subject of the recent events at Fukushima Daiichi Nuclear Power Plant. You can find more at this link: www.helencaldicott.com.

Sarah Gottfried, MD is a brilliant physician located in [Oakland](#) and has been writing about the Japanese disaster and fallout for the last week. She has some on-the-mark observations about this tragedy and how to protect yourself in the aftermath. You can read her blog at: this link: www.gottfriedcenter.com

Center for Disease Control has lots of factual information updates on the situation in Japan and has recommendations for actions to take. You can read more at: www.CDC.gov

First, let's start with a word of caution: I find that when my patients over-consume negative news and websites and blogs they become more traumatized. I have seen this happen close at hand after Loma Preata Earthquake, the Oakland fire in 1991 and after 9/11. I won't go on.

My recommendation is to find one expert source that you trust, from the list above or on your own, and only check in with them 1-2 times a day. The reason I suggest limiting reading of websites or blogs or viewing the news is that it only serves to make many of my patients too anxious and worried. What is happening in Japan is an unfolding tragedy and bears watching for our own safety, but too much hour-to-hour saturation only intensifies our stress. As my colleague, Cathy Dana, trauma specialist suggests, by following the advice of one trusted source you can take measures to be prepared but not get into a helplessness spiral, and have enough factual information to stay informed and in control.

Second, let's discuss how best to take care of yourself in the event of radiation exposure. At the nuclear plants in Japan where the

radiation levels are high and very real, the taking of potassium iodide is the recommended course of treatment for high level radioiodine exposure. Potassium iodide is a high dosage pill taken 1 time right at the time of exposure. The pill floods the thyroid with iodine so that it won't absorb the radioactive iodine released in the toxic radioactive gases. **WARNING:** this is not a dose of iodine you would take unless you have a strong possibility of high levels of radiation exposure. Also this will only protect you from radioiodine not any of the other radioactive particles that would be in this gas. I agree with the US **Surgeon General**, Regina Benjamin that we should have this in our disaster prep kits just like we have food and water.

I want to make sure that you understand that iodine is one of the essential nutrients. It is in my multivitamin. This is one of the reasons I recommend a daily multi, so that you are prepared and supplemented. We know that iodine is needed for the thyroid to function as well as used by the uterus and breast tissue. Too much iodine in your system can cause widely differing symptoms that varies from person to person, so one dose does not fit all.

Too much iodine can cause a reaction similar to too much caffeine and keep you up, feeling jittery and in an over excited state. It can also have the opposite effect causing depression and fatigue. Usually if you take iodine and you feel bad you have got the wrong dose. To purchase potassium iodide you can usually find it at your **local health food store** or pharmacy. Or you can buy it online from a reputable source like **Amazon.com**. At this time it may be difficult to get it but when you do it goes into your emergency kit So far the levels of radiation have been low in Tokyo and California . However in California we have a hot line provided by the California Department of Public Health that you can call at **916-341-3947** for updates on the situation. They also have a webpage with frequently asked questions about radiation that is very good. **www.cdph.ca.gov/faq**

If you have young children, or you are lactating or pregnant talk to your primary care provider before you start on any course of prevention and protection. You need to be very careful not to overload children's thyroids.

3. How to deal with fear and anxiety for yourself and your loved ones

Are you able to do this by yourself or do you need a “Designated Information Officer”; some one you know and trust who will inform you about current state of affairs as it relates to the current tragedy and unfolding nuclear situation? If this activity of staying informed energizes and empowers you then fine but if you feel helpless then you need to reach out and find an information buddy. Make sure they understand this responsibility and only give you what you need to be safe.

Think about how you take care of yourself during normal times and make sure you do these activities or exercises. Do you exercise regularly, take walks, spend time with friends, read books, listen to good music, meditate, [practice Tai Chi](#), prayer, take a relaxing bath, smell the flower blossoms or just make sure you get enough sleep. Continue with these activities and remember it is spring so add something new. Also remember that your body is designed to cleanse and regenerate, it is doing it right now. Your body has an innate intelligence, it wants to live and every cell is guided by this purpose.

And of course you can see me for an acupuncture treatment or herbal consultation so I can help maintain your Chi and energy at an optimum level.

In health,

Susan Wallace, L.Ac.

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