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Is There Radiation in Your Seafood?

— By [Kiera Butler](#) ([authors/kiera-butler](#)) | Mon Apr. 11, 2011 2:30 AM PDT



[seiho](#)

(<http://www.flickr.com/photos/seiho/3663314670/sizes/z/in/photostream>)

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The oceans around Japan's Fukushima Daiichi nuclear power plant are beginning to show troubling signs of radioactivity. Recent [tests](http://www3.nhk.or.jp/daily/english/05_27.html) (http://www3.nhk.or.jp/daily/english/05_27.html) by TEPCO found levels far surpassing legal limits, iodine by 7.5 million times and cesium by 1.1 million times. As *MoJo* environmental correspondent [Julia Whitty](http://motherjones.com/authors/julia-whitty) (<http://motherjones.com/authors/julia-whitty>) has reported in [several](http://motherjones.com/blue-marble/2011/04/japans-radioactive-ocean) (<http://motherjones.com/blue-marble/2011/04/japans-radioactive-ocean>) [recent](http://motherjones.com/blue-marble/2011/03/radioactive-ocean) (<http://motherjones.com/blue-marble/2011/03/radioactive-ocean>) [posts](http://motherjones.com/blue-marble/2011/03/radiation-travel-models) (<http://motherjones.com/blue-marble/2011/03/radiation-travel-models>), radioactive

material is now entering the marine food web, and will likely only continue to work its way up. And ocean currents are carrying the contaminants far and wide. As a result of the increased radiation levels, several countries, including Hong Kong, Russia, and India, have enacted temporary bans on Japanese seafood imports. But so far, there is no such ban in the US.

So should I steer clear of sushi?

Some experts believe that there's little cause for concern. Andrew Maidment, an associate professor of radiology at the University of Pennsylvania, points out that people are typically exposed to 3 millisieverts of "background radiation" every year. (Did you know that [Fiesta ware](http://www.youtube.com/watch?v=fJf-VpR7foM) (<http://www.youtube.com/watch?v=fJf-VpR7foM>), [smoke detectors](#)

(http://www.epa.gov/rpdweb00/sources/smoke_alarm.html), and [bananas](#)

(http://en.wikipedia.org/wiki/Banana_equivalent_dose) all emit low levels of radiation?) Maidment says that according to data from TEPCO, eating seafood from near the Fukushima plant for a year would up your radiation exposure by .6 millisieverts, roughly a 20 percent increase from normal background exposure. "But all kinds of things can increase your radiation levels," says Maidment. "People who live at high altitudes can easily be exposed to twice the radiation of people at sea level, for example."

FDA spokeswoman Siobhan DeLancey assured me that so far, imported seafood that the agency has tested has not shown elevated levels of radiation. She attributed this in part to the ocean's ability to both dilute radiation and protect marine life. "Airborne radiation settles on the surface of the water and acts as a barrier to fish under the surface," she wrote in an email. "In the case of a direct release into the sea, the amount of water in the ocean rapidly dilutes and disperses the radiation to negligible levels."

But other scientists are not so sure that ocean ecosystems are in the clear. Over at [Yale e360](#) (http://e360.yale.edu/feature/radioactivity_in_the_ocean_diluted_but_far_from_harmless/2391/) Elizabeth Grossman has a great, comprehensive rundown of what scientists know about radiation's effect on sea life, and what they have yet to figure out. This is interesting:

How the radioactive materials released from the Fukushima plants will behave in the ocean will depend on their chemical properties and reactivity, explained Ted Poston, a ecotoxicologist with the Pacific Northwest National Laboratory, a U.S. government facility in Richland, Washington. If the radionuclides are in soluble form, they will behave differently than if they are absorbed into particles, said Poston. Soluble iodine, for example, will disperse rather rapidly. But if a radionuclide reacts with other molecules or gets deposited on existing particulates—bits of minerals, for example—they can be suspended in the water or, if larger, may drop to the sea floor.

Given all the unknowns, you'd think testing US oceans for radiation would be top priority for the government. Is it?

Sure doesn't seem like it. I emailed the National Oceanic and Atmospheric Administration to ask how the agency was testing for radiation in the ocean. A spokeswoman would only tell me that "NOAA is playing a supporting role in the Administration's response effort." When I asked her to describe exactly what that role was, she declined to answer.

Meanwhile, the environmental health advocacy group [Food & Water Watch](#) (<http://www.foodandwaterwatch.org/blogs/food-water-watch-on-gma/>) has criticized the FDA for inadequate

inspection of imported seafood. FWW executive director Wenonah Hauter told me that the agency inspects only 2 percent of all seafood imports. The FDA's DeLancey would neither confirm nor deny Hauter's assertion, saying only: "While it's difficult to quantify exactly how much of a given product is subject to inspection, FDA uses its knowledge of various import factors and vulnerabilities to target for the most efficient and effective public health intervention. Because of the potential for radionuclide contamination, we have chosen to screen all foods from Japan very stringently until the situation stabilizes."

So which elements could eventually wind up in my sushi, and how long will they stick around?

It's hard to find specific information about the health effects of radiation, but here's what I've cobbled together: The three radioactive elements present in greatest quantities around Fukushima are iodine-131, cesium-134, and cesium-137. Iodine is of the greatest immediate concern, since both humans and sea mammals accumulate it in the thyroid. Luckily, it only has a half-life of eight days, so the levels around Fukushima are already dropping dramatically. The cesiums, on the other hand, are more of a long-term risk: Cesium-134 has a half-life of two years, and cesium-137, 30 years. Damon Mogler, director of the climate and energy program at the environmental advocacy group [Friends of the Earth](http://www.foe.org/) (<http://www.foe.org/>), told me that "cesium builds up in bottom feeders, crustaceans and bivalves, which in turn get eaten by bigger fish, and ultimately, people." Maidment explains that since cesium is chemically similar to potassium, the body processes it similarly, meaning it can build up in muscle tissue.

What are the potential health effects of ingesting radiation from seafood?

No one knows yet whether the radiation from the Fukushima disaster will build up in levels high enough to cause human health problems, but we do know that accumulation of radiation in your body can lead to cancer. The EPA has a pretty good explanation of how it works [here](http://www.epa.gov/rpdweb00/understand/health_effects.html#q1) (http://www.epa.gov/rpdweb00/understand/health_effects.html#q1).

Are people eating less seafood because of radiation fears?

Yes, report [Bloomberg](http://www.bloomberg.com/news/2011-03-17/sushi-restaurants-drop-japanese-fish-from-menus-as-radiation-concerns-grow.html) (<http://www.bloomberg.com/news/2011-03-17/sushi-restaurants-drop-japanese-fish-from-menus-as-radiation-concerns-grow.html>) and the [NY Times](http://www.nytimes.com/2011/03/20/world/asia/20food.html) (<http://www.nytimes.com/2011/03/20/world/asia/20food.html>). Several important fish auctions around the world were canceled in the wake of the nuclear disaster, and [NPR](http://www.npr.org/2011/04/05/135118987/sushi-science-fear-not-radiation-seen-as-risk) (<http://www.npr.org/2011/04/05/135118987/sushi-science-fear-not-radiation-seen-as-risk>) reports that prices at Japan's famous Tsukiji fish market have "plummeted." FWIW, I called a local sushi restaurant called [Tsukiji](http://tsukijisushimv.com/) (<http://tsukijisushimv.com/>) in Mill Valley, California, and they told me business had slowed down "a little bit" in recent weeks.

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Radioactivity is increasing in the waters near Japan's Fukushima plant. But nuclear pollution in the oceans is nothing new.

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Kiera Butler is the articles editor at Mother Jones. For more of her stories, [click here](#) (<http://www.motherjones.com/authors/kiera-butler>). Get Kiera Butler's [RSS feed](#) ([/rss/authors/1022](#)).

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([#comment-182340575](#))<http://disqus.com/google-96ac1e3dd1866720041207f27dd1c715/>

No reason for concern here-----look over here, not there. Never mind, we will tell you when there is a problem.

Sorry but this all sounds so very Republican, and I for one do not trust anything Republican.

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<http://disqus.com/zollner> **zollner** and 32 more liked this (#)

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**SPacific** *Today 06: 21 AM* ([#comment-182437452](#)) *in reply to KENNETH LANE*
([#comment-182340575](#))<http://disqus.com/guest/19cd5103d139454a0e4afe580dcdd523/>

Totally agree with your assessment Ken.

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1 person liked this.

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**Sparafucile** *Today 10: 27 AM* ([#comment-182595127](#)) *in reply to KENNETH LANE*
([#comment-182340575](#))<http://disqus.com/guest/5e7e76c9ba95eeaeb8c60d9ca19684a8/>

That's because physics is a Republican concept. There are no emotions involved.

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1 person liked this.

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**westomoon** *Today 12: 37 PM* ([#comment-182667797](#)) *in reply to Sparafucile*
([#comment-182595127](#))<http://disqus.com/guest/7db7a706c84e6e5655923bf60d14922e/>

Are you kidding? Physics relies on objective fact, math, and the scientific method, all of which are anathema to the Republican party of today. These are the people who regard the theory of evolution as just Darwin's opinion, and who consider creationism to have equal standing with science -- and that's just the tip of the Dark-Ages iceberg.

And "no emotions" is a Republican trait? The R Speaker of the House blubbers like a reality-show heroine.

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3 people liked this.

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**Johnny Winebox** *Today 02: 29 PM* ([#comment-182742525](#)) *in reply to westomoon* ([#comment-182667797](#))

[\(http://disqus.com/motherjones-b445b6a3cf7b9788286f2e88c768be28/\)](http://disqus.com/motherjones-b445b6a3cf7b9788286f2e88c768be28/)

Listen, We all need to stop, take a breath and Pray. OK? OK. Westomoon you go first. There is nothing Jesus can't save us from. Lets bowl our heads.

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westomoon *Today 06:50 PM*
 ([#comment-182848301](#)) [in reply](#)
[to westomoon](#) ([#comment-182667797](#))

[\(http://disqus.com/guest/7db7a706c84e6e5655923bf60d14922e/\)](http://disqus.com/guest/7db7a706c84e6e5655923bf60d14922e/)

Johnny, why do you single me out as in need of prayer? Because I described a group of people accurately, and really quite moderately?

You can love your enemy and still see them clearly -- dontcha remember, "hate the sin, love the sinner"? I assume these are good people, but they have been infected by a very ugly way of thinking.

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Ormond Otvos (<http://www.facebook.com/people/Ormond-Otvos/100000511212727/>)
Today 10:35 AM ([#comment-182598530](#)) [in reply to KENNETH LANE](#) ([#comment-](#)

[\(http://disqus.com/facebook_182340575_-100000511212727/\)](http://disqus.com/facebook_182340575_-100000511212727/)

You'll fly in an airplane, drive a car, have a cat scan for a headache, take drugs -- all on scientific assurance they're safe. But RADIATION! WOO WOO!

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Jollyd *Today 11:32 AM* ([#comment-182624900](#)) [in reply to Ormond Otvos](#)
 ([#comment-182598530](#))

[\(http://disqus.com/guest/00615ed423c6a2de61f86ef1899f16ab/\)](http://disqus.com/guest/00615ed423c6a2de61f86ef1899f16ab/)

Doesn't that translate from the Japanese as "idiot tea"?

Nothing as sexy as a man that has the Radiation answers.

You go, Ormondo!

Why I bet you have a Masters Degree.

What's the difference between a nudnik and a phdnick?

phd

Please! someone prove how very safe low level radiation really is. It is isn't it?
 Make citations for the research in low level radiation and not lame ass comparisons that just immerse you in confirmation fallacies causing intellectual myopia.

Anyone selling Charlie Sheen tickets?

Go Iceland!

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2 people liked this.

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J. Frank Parnell *Today 02:24 PM (#comment-182738925)* [in reply to Jollyd \(#comment-182624900\)](#)

[\(http://disqus.com/motherjones-1908/\)](http://disqus.com/motherjones-1908/)

The general feeling is that if the additional level of radiation is small compared to the natural levels we are all exposed to, it can be considered "safe". You don't see people being urged to move out of Denver, avoid brick homes, long distance high altitude flights, or dental x-rays; most people consider these "safe" although all will increase your radiation exposure, and on some level increase your odds of getting cancer.

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True Green *Today 08:39 PM (#comment-182909003)* [in reply to Ormond Otvos \(#comment-182598530\)](#)

[\(http://disqus.com/motherjones-f5e6c4f2419b8302811f2092114c65d6/\)](http://disqus.com/motherjones-f5e6c4f2419b8302811f2092114c65d6/)

Hey ~ ~Ormond~ ~ have you ever purposfully inhaled or injected any Caesium --137 or plutonium? Riding in an airplane, or having an x-ray or a cat scan does not inject radio-active isotopes into our body or our blood stream... Btw, our cat does not emit radiation poison when it scans us.

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Jhanab *Today 03:34 AM (#comment-182358036)*

[\(http://disqus.com/guest/a790c6d922289127c24b9b0be2798e17/\)](http://disqus.com/guest/a790c6d922289127c24b9b0be2798e17/)

I find your teasers really manipulative and your content not very informative. I'm pretty close to opting out of these mailings.

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<http://disqus.com/facebook-100000511212727> Ormond Otvos and 6 more liked this (#)

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Jess Bachman <http://byJess.net> *Today 07:47 AM (#comment-182513356)* [in reply to Jhanab \(#comment-182358036\)](#)

(<http://disqus.com/jessbachman/>)

agree, this was lame.

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2 people liked this.

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Justin *Today 08:06 AM (#comment-182529976)* [in reply to Jess Bachman \(#comment-182513356\)](#)

(<http://disqus.com/guest/8d8074546a027173b0a4f6959e21831c/>)

so...getting radiation poison is lame? But TMZ on Charlie Sheen and Lindsey Lohan is cool right?

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2 people liked this.

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Jess Bachman (<http://byJess.net>) *Today 08:11 AM (#comment-182531836)* [in reply to Justin \(#comment-182529976\)](#)

(<http://disqus.com/jessbachman/>)

No, this content is lame. Deceptive headline + uninformative article. Who is Charlie Sheen and Lindsey Lohan?

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(<http://disqus.com/FellFeline>) **FellFeline and 2 more liked this (#)**

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Rossharwood *Today 03:48 AM (#comment-182371566)*

(<http://disqus.com/guest/84cd27c88a4982dc6f7fc959e46423e1/>)

If other countries are opting out I would.

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(<http://disqus.com/FellFeline>) **FellFeline and 8 more liked this (#)**

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Cheryl *Today 05:19 AM (#comment-182417376)* [in reply to Rossharwood \(#comment-182371566\)](#)

(<http://disqus.com/guest/ac083ce808fb77fb7217d0b95c4fa44d/>)

Most other countries protect their people over businesses. Here in the U.S. people serve the government instead of the other way around. We are and will continue to be exposed to more and more toxins as there are less restrictions and oversight on business and pollution and dangerous drugs.

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(<http://disqus.com/FellFeline>) **FellFeline and 21 more liked this (#)**

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jack (<http://jack113.250free.com/politics>) *Today 04:39 AM (#comment-182406053)*

(<http://disqus.com/jack113/>)

Radiation is just one of the problems with seafood. Mercury is just as bad and the seafood from the BP Gulf disaster is poison.

Politicians of any political party and their paid federal departments are not to be trusted with our food safety and people need to look at seafood and how it is being poisoned worldwide by corporate criminals like GE, BP and all big corporations that are destroying our food supply.

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(<http://disqus.com/FellFeline>) **FellFeline** and 19 more liked this (#)

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JE *Today 04:40 AM* (#comment-182406435)

(<http://disqus.com/guest/07cf418046dcb5f7a6200cc02c06be3a/>)

Are the limits mentioned per serving, and does this radiation remain in the human body forever?

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2 people liked this.

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jack (<http://jack113.250free.com/politics>) *Today 12:09 PM* (#comment-182648929) [in reply to JE](#) (#comment-182406435)

(<http://disqus.com/jack113/>)

Their is no such thing as safe radiation levels.

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2 people liked this.

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J. Frank Parnell *Today 02:49 PM* (#comment-182749968) [in reply to JE](#) (#comment-182406435)

(<http://disqus.com/motherjones-1908/>)

You need to distinguish between radiation, and radioactive elements, which give off radiation. Many radioactive elements can be concentrated up the food chain (the plankton concentrate the Cesium 137 in seawater, the little fish concentrate the plankton, the medium size fish concentrate the little fish, and so on), which is why a large fish like tuna can be tens of thousands of times more radioactive than the ocean it swims in. Most of the radioactive elements will "turn over" in the body and eventually be excreted, with a few very notable exceptions like Strontium 90 and Plutonium. These tend to settle in your bones and stay there.

There is no "safe" level of radiation, but there are levels where the risk is minimal compared to all the other risks in life we willingly accept. Personally I avoid blue fin tuna out of concern for both the mercury concentration and the declining blue fin population.

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singaporestacey *Today 04:51 AM* (#comment-182409555)

(<http://disqus.com/guest/11522deb24903aac4a7c9210230fc2a0/>)

It's funny, I'm in Singapore right now and most Japanese food is mostly off the shelves, incoming shipments are scanned for radiation and turned back to Japan. Every single Japanese restaurant is completely empty. People are totally calm, no one really talks about it. I'm left thinking that this "all-controlling government" has its shit together while North America looks like it's caught with it's pants down (again).

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<http://disqus.com/FellFeline> **FellFeline** and 17 more liked this (#)

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windofchange [Today 06:52 AM \(#comment-182465209\)](#) [in reply to singaporestacey \(#comment-182409555\)](#)

<http://disqus.com/windofchange/>

You probably don't chew gum in the elevator and spit on the side walk either. The Lees are/were tough eggs, but the place was clean when I was there and you could go out at night without getting mugged. The "ladies" didn't persist if you declined like in Washington, DC. You might get stabbed with large scissors there as the hole is nastier than with a knife.

I hope that Jarong bird park, orchids and Sentosa Island are still being maintained.

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carlhere [Today 05:11 AM \(#comment-182414526\)](#)

<http://disqus.com/carlhere/>

If you trust the government to tell you the truth, you may pay the ultimate price.

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<http://disqus.com/yahoo-WUP35NB7RZBLPTKGOXGZZBVY5I> **Anna Svensson** and 10 more liked this (#)

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Mike Snoddy <http://www.facebook.com/people/Mike-Snoddy/100000099910997> [Today 11:11 AM \(#comment-182614768\)](#) [in reply to carlhere \(#comment-182414526\)](#)

<http://disqus.com/facebook-100000099910997/>

Either side

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LJCcat [Today 05:30 AM \(#comment-182420115\)](#)

<http://disqus.com/guest/e4bb1797e60a921ea0d2733b1d00c5a4/>

How long does it take tuna swim from Japan to our west coast, and what radiation will they be bringing with them?

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<http://disqus.com/FellFeline> **FellFeline** and 2 more liked this (#)

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Karl F. Ehrlich, Ph.D. [Today 05:51 AM \(#comment-182427232\)](#)

<http://disqus.com/guest/148676b041073582bbac982bf268ad38/>

Fishes are not necessarily the first place to look. Kelp can concentrate radioactive iodine over 30,000 times. It then eaten or used by others from abalone to people. Kelp is harvested in California to make agar, which is used in many products from ice cream, to prevent crystal formation, to cosmetics... Of course we are told everything is safe, what else could they say. We are told the risk of nuclear accidents is low for any one plant, but add up the number of plants worldwide and the risk becomes important. Nuclear accidents affect the planet. Nuclear energy is too risky to be acceptable. It must be eliminated. Think conservation and multiple alternative energy. Both will create new industries.

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(<http://disqus.com/facebook-1311143712>) **Virginia Gilbert and 11 more liked this (#)**

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windofchange *Today 07:03 AM (#comment-182474304)* in reply to Karl F. Ehrlich, Ph.D. (#comment-182427232)

(<http://disqus.com/windofchange/>)

If the surfers start glowing, you will know that it has reached the kelp beds off the California coast. It probably won't stop people from gathering and eating abalone though. I hope that it doesn't kill off the otters. Watching them is one of my favorite forms of entertainment.

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1 person liked this.

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PrMaine *Today 05:58 AM (#comment-182429294)*

(<http://disqus.com/PrMaine/>)

No doubt we will have some increase in radiation even here in the U.S. It may not be much of an increase, but then again there is no safe level of radiation. Every increase in radiation will increase the number of cancers. I suppose that is not a problem unless you happen to be one of the few who gets the additional cancer.

I heard that eating krill can help one resist the harmful effects of radiation. I ate krill in Japan once - it's a bit crunchy but not bad on rice. Outside of Japan, however, I'm not sure where one gets krill that is packaged for eating.

Does anyone know whether krill oil is at all helpful in this regard? It is readily available here.

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Ormond Otvos (<http://www.facebook.com/people/Ormond-Otvos/100000511212727>)
Today 10:45 AM (#comment-182603132) in reply to PrMaine (#comment-

(<http://disqus.com/facebook-182429294>)
-100000511212727/)

There are safe levels of radiation. Try reading about genetic repair mechanisms. You want radiation, try second hand smoke.

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1 person liked this.

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**FST** [Today 06:10 AM \(#comment-182432905\)](#)<http://disqus.com/guest/9f927bb02c3ff541fd48cb974fff0a02/>

The US government keeps saying not to worry because we are exposed to radiation everyday in many ways. So my question is..how much radiation is safe? Every bit just adds to the total amount and sooner or later there is going to be too much. Will they tell us when there is too much exposure? I think not because there is too much money involved and too much to be lost. For a government that was put into place to work for "The People", they sure do a lot to protect "The Big Corporations".

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7 people liked this.

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**Auntmad** [Today 06:39 AM \(#comment-182452006\)](#) [in reply to FST \(#comment-182432905\)](#)<http://disqus.com/guest/03348cde4c1edadbf3658cf16eb1c07e/>

Amen!

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1 person liked this.

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**Ormond Otvos** <http://www.facebook.com/people/Ormond-Otvos/100000511212727/><http://disqus.com/facebook-100000511212727/> [Today 10:38 AM \(#comment-182599826\)](#) [in reply to FST \(#comment-182432905\)](#)

Actually, your body repairs low level damage, so you can stop worrying about accumulation. Try reading sciam.org (<http://sciam.org>) instead of this woo woo crap.

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**J. Frank Parnell** [Today 03:06 PM \(#comment-182756490\)](#) [in reply to FST](#)<http://disqus.com/motherjones-1908/> [\(#comment-182432905\)](#)

I am on the other side from Ormond. Any radiation does probably cause some genetic damage, not all of which is necessarily repaired. Still, there is a level where the risk is so low as to be minimal. We all accept that when we get in a car we may get killed, but it's worth it to be able to travel quickly and conveniently; yet this doesn't mean we needlessly increase the risk by driving 100 mph while drunk. The primary negative effect of low level radiation is an increased cancer rate, but at low levels the increase will be negligible compared to other causes of cancer. More radiation means more risk; this no level at which it changes from safe to dangerous. At the same time we still build brick houses, which expose their inhabitants to more radiation.

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Emile Zola [Today 06:21 AM \(#comment-182438059\)](#)[20f0c6e387c1ebb1bdbe52/](#)

ment, any government establishes some parameters as a defensive way to its survival, its thriving and whatever stands on its way, fact or truth, it is no matter what. What is, was the reason given when the government, or? It's either panic or crimes; whichever, they are not going to tell even if the board every woman and child in America. Only God knows the sins, crimes committed by our "democratic" governments, corrupt politicians, corrupt corporations and to prove my point, let me just use two examples: BP and the Twin Towers.

I can bet whatever little I have that we will never know what really happened with those two tragedies. If it is criminal, there is no way in hell that we will ever find out the truth, ergo, it is my advice to buyer beware and use all precautions when dealing with anybody and everybody.

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**windofchange** [Today 07:20 AM \(#comment-182489615\)](#) [in reply to Emile Zola \(#comment-182438059\)](#)[\(http://disqus.com/windofchange/\)](http://disqus.com/windofchange/)

Magna est veritas et prae va le bit – the truth is mighty and will prevail when it leaks out. The Twin Towers controlled demolition has leaked out faster and better than BP. As the dots become connected, the truth unfolds its wings and begins to take shape.

All truth passes through three stages. First, it is ridiculed. Second, it is violently opposed. Third, it is accepted as self-evident. Arthur Schopenhauer.

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**Katyp85** [Today 06:25 AM \(#comment-182440562\)](#)[\(http://disqus.com/guest/630d02a81a796910d123a7ecc8011a52/\)](http://disqus.com/guest/630d02a81a796910d123a7ecc8011a52/)

I guess we all need geiger meters now

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**Auntmad** [Today 06:37 AM \(#comment-182450707\)](#)[\(http://disqus.com/guest/03348cde4c1edadbf3658cf16eb1c07e/\)](http://disqus.com/guest/03348cde4c1edadbf3658cf16eb1c07e/)

Sushi is not shipped from Japan, it's made fresh here with fish from our waters is it not? So why would there be a radiation problem? I am not going to be buying any seafood from our gulf or from Japan until 2 weeks after Hell freezes over if I can help it. I do want to know where my food comes from, if it is radiated, genetically modified, has anything to do with Monsanto's anything, etc. I want local, organic, unpolluted, plain old honest food even if I have to raise my own fish in my own bathtub. If our food is coming from Japan, please tell us which companies are being that foolish and endangering our health without our permission so we can tell our grocery stores to stop that right now.

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Ormond Otvos (<http://www.facebook.com/people/Ormond-Otvos/100000511212727/>)

Today 10:39 AM (#comment-182600532) in reply to Auntmad (#comment-

<http://disqus.com/facebook-100000511212727/> [182450707](http://disqus.com/facebook-182450707/))

All food crops are genetically modified. Hell, your mom and pop produced a genetically unpredictable person when they had you! Stop worrying, wash your hands, drive safely, eat less, get some exercise.

The rest is drivel.

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Anon_E_Mouse *Today 11:56 AM (#comment-*
182640852) in reply to Auntmad (#comment-

<http://disqus.com/guest/1faf506c8b15efa6f0ffd0cacecd4eca/> [182450707](http://disqus.com/guest/182450707/))

Some sushi does come from Japan. I buy my personal sushi fish at a Japanese grocery store. Hamachi (Yellowtail), Saba (Mackerel), Tobikko and Masago fish eggs and other items come from Japanese suppliers. The Hamachi is farmed instead of wild since the overfishing is limiting the wild sources. It is all shipped vacuum packed and frozen.

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westomoon *Today 06:57 PM (#comment-182852815)* in reply to Auntmad

(#comment-182450707)
<http://disqus.com/westomoon/>

Auntmad, I've been realizing that this year, the nice homegrown open-pollinated organic vegetables I like to raise will be regularly watered with Fukushima rain.

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Conservative1 *Today 07:16 AM (#comment-*
182485889)
<http://disqus.com/guest/c4f1f9103f713b50d85d08ac621ae938/>

I think one of the most disturbing pieces of information in this article was the fact that NOAA saying that they were part of the Administrations response plan and could not elaborate as to what that plan entailed! Has the pendulum in this country swung so far that scientists can no longer give a simple answer to a question without fear of political repercussions. No wonder that creationism is making a comeback!

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Dreambuilder *Today 07:36 AM* (#comment-182502737)

<http://disqus.com/guest/74af770bf0d74c354755140da8126e6c/>

It is not clear to me how meaningful the background radiation comparison is. As I understand the sun is one source of background radiation and I would guess that composition of the suns radiation may be different than the radiation coming from a reactor.

Another difference is of course that we cannot do much to control the sun but can do a whole bunch about wether we build a reactor.

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Ormond Otvos (<http://www.facebook.com/people/Ormond-Otvos/100000511212727/>)

Today 10:41 AM (#comment-182601241) in reply to Dreambuilder (#comment-

http://disqus.com/facebook_182502737_-100000511212727/

Maybe you should read up on radiation. Buy a textbook. The sun is a fusion reactor. Flying in a plane increases your load, but not beyond the repair limits evolution on this planet has supplied for you.

Don't be herded like sheep by fanatics.

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hadquiteenuf *Today 05:47 PM*

(#comment-182812925) in reply to Ormond

<http://disqus.com/guest/0144dc51247a5059ea8ca0e254fad5c4/> **Otvos** (#comment-182601241)

Maybe you should read up on it yourself Ormond. I don't believe the sun bombards us with particles of Cesium or radioactive Iodine that persist in our bodies and the environment, accumulating in our thyroids, muscles etc, and continuing to emit radioactivity internally that causes cancer.

You yourself pointed out the flaw of your argument: .."but not beyond the repair limits evolution on this planet has supplied for you..." We evolved with the sun, not with man-made radioactive particles. It's quite a different thing. You don't hear discussions about the 1/2 life of solar particles

and how long they will persist in the environment because we don't need to worry about that. We don't have to worry that the sun shined on that patch of grass yesterday, because if it's cloudy today, there's no residue that can harm us.

Furthermore, if we want to, we can avoid most solar radiation. But we can't stop breathing or eating, so if the air, grass, soil is contaminated with long lasting radioactive particles which our bodies incorporate into our tissues by mistaking them for nutrients we need, we are pretty much screwed.

And by the way, plenty of people do get cancer. It... [show more \(#\)](#)

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originalone [Today 07:58 AM \(#comment-182525755\)](#)

[\(http://disqus.com/originalone/\)](http://disqus.com/originalone/)

There are many varieties of Sushi, but that said, I believe that no matter what the ingredients, there will be some level of radiation. After all, even though the sensors are out of service here on the west coast, we see the levels rising. Besides, the Government won't tell us the truth, because they enable the Nuclear Industry, but then, we shouldn't expect anything less from them.

If you enjoy eating such foods, then by all means, eat them, for I don't really believe that doing so will shorten your life span anymore than the rest of the poisons we are exposed to.

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Linda (<http://pulse.yahoo.com/SAXB7YCUGONEME7H4QBR52KXUA>) [Today 08:00 AM \(#comment-182527672\)](#)

[\(http://disqus.com/yahoo-SAXB7YCUGONEME7H4QBR52KXUA/\)](http://disqus.com/yahoo-SAXB7YCUGONEME7H4QBR52KXUA/)

Two things bear mention.

Radiation from surface contact, or exposure to radiation external to your body is quite different from internal exposure. All the regulations are for external exposure. I have yet to see ANY report that details internal effects adequately.

I have less angst about the sea than I do about our water supplies in the US. I telephoned my water company. In the Bay Area we get all our water from the Hetch Hetchy Reservoir, over 100 miles away in the foothill of the Sierra Mountains. It is clean, pure, and comes unchanged to my home, gravity-fed and potable. It is also open-air, and exposed to contaminated rainwater. Elevated levels of radiation have been,

and are being found, in rainwater. Testing in Berkeley find levels of iodine and cesium isotopes unsuitable for human consumption in drinking water. When I contacted the acting director of Water Quality , he informed me that they don't do, indeed are not doing, any testing for radiation on their own accord. they sit back and wait for the federal guvmint to let them know when they should test.

If clear documentation of both air plume radioactive particles, and contaminated rainwater are not threshold...[show more \(#\)](#)

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(<http://disqus.com/Bystanding>) **Bystanding** and 4 more liked this (#)

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Ormond Otvos (<http://www.facebook.com/people/Ormond-Otvos/100000511212727/>)

Today 10:43 AM (#comment-182602348) in reply to [Linda \(#comment-182527672\)](#)

(<http://disqus.com/facebook-100000511212727/>)

No numbers given, therefore another scare posting. How about a millisievert or two?

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Linda (<http://pulse.yahoo.com/SAXB7YCUGONEME7H4QBR52KXUA>)

Today 05:34 PM (#comment-182808313) in reply to [Ormond Otvos](#)

(<http://disqus.com/yahoo-SAXB7YCUGONEME7H4QBR52KXUA/>)

([#comment-182602348](#))

What numbers would you like? I was trying to just make a point, but I can back it up if you like. And millisieverts are not the units that are used when measuring radioactivity in the environment, they are used when assessing the total exposure of a human to radioactivity.

Berkeley results: <http://www.nuc.berkeley.edu/Ra...> (<http://www.nuc.berkeley.edu/RainWaterSampling>)

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Cherie Zahn *Today 09:08 AM (#comment-*

182558279)

(<http://disqus.com/quest/3f62176518a4505ddc78234d05233ad7/>)

Real information! Thank you!

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1 person liked this.

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SwissMiss *Today 09:18 AM (#comment-182562782)*

(<http://disqus.com/quest/d4beb5cc4c75b81c42afc794c1ee0afe/>)

Eating sushi before Fukushima was potentially hazardous to your health. People should resist eating all types of seafood anyhow before we decimate whatever's left.

We should be more worried about radionuclides in mother's milk. Any studies going on with that?

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Gilbertron9 *Today 10:08 AM (#comment-182586993)*

(<http://disqus.com/guest/f84746d5a19096f798ca30322a795a14/>)

NO NUKES !!!

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Ormond Otvos (<http://www.facebook.com/people/Ormond-Otvos/100000511212727/>)

Today 10:42 AM (#comment-182601765) in reply to Gilbertron9 (#comment-

-100000511212727/) (http://disqus.com/facebook_182586993)

No NUTS!

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Gilbertron9 *Today 10:12 AM (#comment-182588672)*

(<http://disqus.com/guest/f84746d5a19096f798ca30322a795a14/>)

Why doesn't the thought occur to use water for fuel?

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Ormond Otvos (<http://www.facebook.com/people/Ormond-Otvos/100000511212727/>)

Today 10:42 AM (#comment-182601635) in reply to Gilbertron9 (#comment-

-100000511212727/) (http://disqus.com/facebook_182588672)

Because it isn't fuel? Uranium can be harvested from seawater, but it isn't energy efficient.

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1 person liked this.

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Andrew Reitemeyer (<http://www.facebook.com/profile.php?id=100000103173490>) *Today*

10:36 AM (#comment-182599005)

(http://disqus.com/facebook_-100000103173490/)

Considering alcohol has been linked to cancer, most diners would be better off replacing the glass of wine instead of the fish.

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Jollyd *Today 11:17 AM (#comment-182617525)*

[\(http://disqus.com/guest/00615ed423c6a2de61f86ef1899f16ab/\)](http://disqus.com/guest/00615ed423c6a2de61f86ef1899f16ab/)

"This here is a Westinghouse AP1000. The most powerful ... gee! in all the excitement I forgot to count how many rads I've absorbed, you feeling lucky? punk?!"

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jack (<http://jack113.250free.com/politics>) *Today 12:04 PM (#comment-182645865)* [in reply to Jollyd \(#comment-182617525\)](#)

[\(http://disqus.com/jack113/\)](http://disqus.com/jack113/)

The reactors in Japan were designed by GE and America is going to have 4 just like them, three in Texas and one in Virginia.

You lose as soon as greed becomes more important than human life.

There is no safe radiation levels so why do we continue to say otherwise?

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<http://disqus.com/motherjones-f5efc4f2419b8302811f2092114c65d6> **True Green and 1 more** liked this (#)

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Jollyd *Today 11:46 AM (#comment-182634010)*

[\(http://disqus.com/guest/00615ed423c6a2de61f86ef1899f16ab/\)](http://disqus.com/guest/00615ed423c6a2de61f86ef1899f16ab/)

What's the ignition temperature for zirconium. And what does it do when it ignites? cause that's what's holding all those nice little pellets of death together at the Fuka'd up plant.

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dying bear *Today 11:56 AM (#comment-182640758)*

[\(http://disqus.com/guest/f8ca102437707b7ccd23ed6f1d80d0ca/\)](http://disqus.com/guest/f8ca102437707b7ccd23ed6f1d80d0ca/)

I am neither a member nor a regular reader; just someone searching for any decent info pertinent to our destroyed food chain...and this was not very helpful either.

What part of the ecosphere being rendered non-viable to warm-blooded species by rampant radioactivity is too hard to understand ?

This is NOT an 'if', but only a 'when' by now.

There are in excess of 8 MILLION POUNDS of immediately deadly fuel at Fukushima alone and what

exploded has already spread plutonium into the air and water and ground.

We have exactly ONE planet here folks.

Too bad we seem (as a species) intent to wipe it clean of all but the cockroaches.

And all this arguing is useless; enjoy your loved ones, your toys, your vices - while your health is still good.

There is NO 'safe' exposure level to the components of MOX fuel and that is what got blown sky-high at Fukushima a bunch of times...and is getting dumped into the oceans by the ton.

Our species has placed profit and war over survival and now it is time to pay the piper.

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[. \(http://disqus.com/jack113\)](http://disqus.com/jack113) **jack and 3 more liked this (#)**

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jansumi *Today 12:22 PM (#comment-182658065)*

[\(http://disqus.com/guest/08f3c846606f54aa1d7c19e4d7c030db/\)](http://disqus.com/guest/08f3c846606f54aa1d7c19e4d7c030db/)

Gotta wonder why 'don't worry, things won't get any worse' doesn't seem remotely reassuring somehow...

Hello.

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westmoon *Today 12:46 PM (#comment-182675126)*

[\(http://disqus.com/guest/7db7a706c84e6e5655923bf60d14922e/\)](http://disqus.com/guest/7db7a706c84e6e5655923bf60d14922e/)

Radiation spillage, deepwater oil spills enhanced by zillions of tons of "dispersant", even stormwater runoff lavishly contaminated by agricultural chemicals and road oil -- if we were party to an international project to completely kill off the oceans, we'd be ahead of schedule.

It's interesting that this article, and its comments, both assume that marine life will not be killed by all this radiation -- we're only worried whether *we* can safely keep on killing it for food. But then, any competent mental-health professional would diagnose our species as severely narcissistic, shading into sociopathic.

And, of course, dumb as a post. Dead oceans do not a healthy planet make, folks.

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1 person liked this.

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just_use_your_brain *Today 02:41 PM (#comment-182747078)*

[\(http://disqus.com/guest/c73bf67271038c49e94f4abcc00797df/\)](http://disqus.com/guest/c73bf67271038c49e94f4abcc00797df/)

The reactors are still leaking, and the Geiger counter is still ticking! BP said that ocean "digested" oil with oil dispersants and now reportedly oil balls and slabs are back on the shores of Louisiana.

Wait some more and check the level of radiation in fish. Nothing is instant except the direct explosion. Good luck with the forecasts!!

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S.L. *Today 05:38 PM (#comment-182809618)*

[\(http://disqus.com/guest/f90aa46e53c3f4868073969e8e671d40/\)](http://disqus.com/guest/f90aa46e53c3f4868073969e8e671d40/)

Chernobyl's effects on fish has been well studied and documented over decades, why it is "unknown" is unknown. Just google it. Cesium is aggregated up the food chain, what is dilute in the water becomes highly concentrated the further up the food chain with humans at the top. Sushi, anyone?

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2 people liked this.

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Free bee *Today 06:48 PM (#comment-182847455)*

[\(http://disqus.com/guest/7b8c164a2aa16b7efea55a47c98852cd/\)](http://disqus.com/guest/7b8c164a2aa16b7efea55a47c98852cd/)

The deliberate FAILURE to cap and contain the Fukushima disaster, certainly coming from sources far beyond Japan, is the perfect kick-off for the 2100 Globalist agenda of world population extermination.

80, some say 90% to be incrementally exterminated by that year ON RECORD.

MEANWHILE, monitors are 'readjusted', when they can be found at all, and 'official' radiation tolerance levels are casually raised 28,000%.

We now realize just who and what is in control ---of our 'press'.

And BTW ---these latest devastating aftershocks again coming on an 11.

Listen closely! You can almost hear yuppie gigles.

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Greg *Today 06:58 PM (#comment-182853146)*

[\(http://disqus.com/guest/d5dfd3dc33565461b962730f69a32c10/\)](http://disqus.com/guest/d5dfd3dc33565461b962730f69a32c10/)

Give those swilling carcass waking boats a rest.

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Mdeschane *Today 08:14 PM (#comment-182895770)*

(<http://disqus.com/guest/40dfe481c8e84ec138c9409858079e0a/>)

Gawd, what a poop storm! This article has all the credibility of most supermarket tabloids (unfortunately, I have heard that a disturbing number of people actually lend credence to the articles therein). Facts, facts, facts; non-existent here; levels 7 million times normal reported from a newspaper is not credible. For some real brain food try www.iaea.org (<http://www.iaea.org>), www.world-nuclear-news.org (<http://www.world-nuclear-news.org>), [WWW.epa.gov](http://www.epa.gov) (<http://www.epa.gov>), ... Read before you bleed, don't go off on polemicist like this. And before you say it, governments and corporations are too big and stupid to lie to you, they can't keep a secret, let alone maintain a conspiracy.

Ormond, I love you! Keep up the good fight man.

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True Green *21 minutes ago (#comment-182971620)* in reply to Mdeschane (#comment-182895770)

(<http://disqus.com/motherjones-f5e6c4f2419b8302811f2092114c65d6/>)

The {seven million times safe limit} was reported by__ the __ Japanese __ government....

Their reported figures were published in news papers... Do you understand? The author of this article is correct... So give Ormano a nice big kiss.

I smell a dead rat... Anyone else smell it? __ Oh, maybe it's skills for the nuclear industry? Well, no difference, a dead rat or a skill, same smell... Do you smell it Mdeschane? Bet you do.

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True Green *Today 08:21 PM (#comment-182899671)*

(<http://disqus.com/motherjones-f5e6c4f2419b8302811f2092114c65d6/>)

It is not just seafood from Japan that will be effected... As Julia Whitty's recent MOJO article noted, a large number of fish specie are migrating towards Alaska and migrating right through the area where extremely high levels of radio-active poisons are every day entering the ocean.

As ~ ~Linda~ ~ commented above here, the radiation levels do not include any of the poisons which are injected or inhaled... Caesium is worse than the iodine and has a half life of 25 years so will still be very hazardous for at least 80 years... Caesium emits radiation and if inhaled or injected can end up anywhere in the body and attack and alter any body cells and cause cancerous cells which can and may migrate to any organ of the body, liver, brain, lung, spleen, bone marrow, etc. A person won't die immediately,,, but give it ten to fifteen years, children or an unborn child are far more apt to develop cancers from radiation poisoning as their immune systems are not fully developed.

There is no light at the end of a tunnel for when the radio-active poisons will cease emitting from Japan's plant. They are currently in a (Catch 22) situation...[show more \(#\)](#)

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