## Does radiation bring more or less harm?

**Business** 



What is nuclear radiation? Nuclear Radiation is defined as the energy particles or rays that are given off from a radioactive element, such as uranium, as it decays. Would you consider that a bad thing or a good thing? Well I guess it depends on whether you agree that the benefits of nuclear radiation outweigh the risks or that the risks outweigh the benefits. I personally believe that the benefits outweigh the risks.

I believe this because majority of everything we depend on as human beings involves some type of radiation. Although I am not talking about our greedy conscious of craving something from the microwave, not that radiation. The radiation that we are surrounded around daily but are unaware of. Did you know that natural occurring radiation makes up 50% of our exposure? The food our bodies take in and water we soak up. A benefit would be that the sun too also exposes us to some radiation, but it's not completely bad. The radiation we receive from the sun helps provide vitamin d for our skin, making us healthy, and making sure we benefit from it, but the risk would be too much sunlight and radiation can give you sunspots, very bad burns, and even skin cancer.

Another benefit to Nuclear Radiation would be that it is used to kill germs in some of our everyday food lives to make food not only last longer but safer. It's used to sterilize foods such a milk, meats, and also to make food containers safer for food to be held in. Yet again, too much will not be healthy. Moral of the story, believe it or not, radiation plays a huge part in our everyday normal life. Although there are big risk factors like the nuclear power plants, and MANY health risks without it we wouldn't be here. In a single human being there is (100 bq/kg) which is equivalent to 7000 bq in radioactivity.

\*(becquerel) bq = one atomic decay per second. This produces ionising radiation which is the nuclei of atoms, the basic building blocks of matter. Most are stable, but others change drastically into new atoms. When a nucleus is unstable is has too much excess energy and needs to changed into a smaller element. This is radioactive decay. We stabilize these levels of excess energy with alpha, beta, and gamma.

Alpha particles are made up of 2 protons and 2 neutrons, in the form of atomic nuclei and are doubly charged. Beta particles are fast paced electrons taken from the nuclei of several kinds of radioactive atoms and are singly charged are lighter and taken from at a faster pace than Alpha particles. Gamma rays similar to light represent energy transferred in a wave with little to no movement of material, comparable to heat and light. Still, my point is even with all the bad things that can happen with radiation we need them to realize and be grateful for the good things. For example our lives.

As many risks as there are, is as many benefits. We just have to know our limit, too much of anything is bad for you, especially radiation. The thing that could simply kill us and wipe us off the face of the Earth is helping us everyday, whether it be the sun, our fire alarm going off, that cup of coffee we need before we leave our house, it's always there.