The Magnificent 7: How You Can Protect Yourself from Radiation

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Radiation only harms indirectly. Radiation transfers lots of energy and creates free radicals. Antioxidants safely transfer this energy without harm.

While experts believe that radiation from the damaged Japanese nuclear reactors does not present a serious health risk, you can further protect your health from radiation with a simple regimen of antioxidants.

Radioactive materials cause harm only when not enough antioxidants are present to soak up the extra electrons caused by radioactive particles. Radiation is like a sub-molecular fire. With radioactivity, this fire can reach intensities that destroy the body's natural, protective, fire resistant (antioxidant) barriers. Radiation only harms indirectly. Radiation transfers lots of energy and creates free radicals. Antioxidants safely transfer this energy without harm.

Antioxidants are a family of molecules that network to safely transfer energetic electrons and channel them into useful work through ATP (a high energy molecule that powers many cell reactions). Antioxidants are depleted by oxidative stress that can be caused by toxic minerals, hormone disrupting chemicals, certain persisting pollutants and radioisotopes.

Oxidation caused by radiation or any other stressor, increases your daily requirement for protective antioxidants. If you don’t get enough antioxidants, you will have health problems. Antioxidant deficiency has been linked to an increase in inflammatory conditions that cause increased swelling and pain, autoimmune, chronic and degenerative illnesses. Inflammation means swelling, discomfort and less mobility from repair deficit that accumulates when something needed is deficient.

Practical suggestion: By increasing antioxidants through diet and protective supplementation, you can protect your cells from the effects of radiation.
The Magnificent 7
Supplements that provide comprehensive antioxidant protection are:

- **Coenzyme Q10 & vitamins E in rice bran oil**: 100 mg CoQ10 & 200 IU mixed natural vitamins E, 2 softgels daily

- **Silybin beta rich silymarin and other liver protective antioxidants**: 2 caps twice daily

- **Phase 1, 2, & lipotropic detoxifier**: 2 capsules twice daily

- **Fully reduced, fully buffered 100% l-ascorbate**: Preferably buffered with potassium, magnesium, calcium, and zinc sufficient to keep oxidized LDL/HDL and 8-oxo-guanine from forming

- **Carnitine fumarate and GABA**: Sufficient to keep triglycerides in healthy range
  2 softgels twice daily

- **Methylation factors**: 1 under the tongue twice daily or sufficient to bring homocysteine levels to lowest risk, i.e. < 6

- **Vitamin D3**: Sufficient to bring blood test of 25-OH-vitamin D to within the protective 50-80 range
  5,000 IU twice daily

By taking The Magnificent 7, for at least six months after any exposure to radioactivity above usual background levels, most radioactivity slowly goes away or is removed from the body.

While few people contract cancer, the risk is reduced in proportion to comprehensive antioxidants available as needed. Protective dietary and lifestyle choices further reduce risk.

To ensure optimal protection, increase sulfur rich herbs, fermented and sea sourced protective foods in your diet.

Sulfur rich foods include garlic, ginger, onions, brassica sprouts (broccoli sprouts), and eggs (duck, goose or chicken). One or more of these sulfur rich foods should be staples of your diet. They are traditional protective or ‘healing’ foods.

Herbal, green and white teas rich in ECGC are recommended. Fresh or freeze-dried vegetable juices and fiber or pulp rich juices are recommended. Drink enough water to stay well hydrated. Avoid added nutrient poor simple sugar sweeteners.

Fermented foods with healthy prebiotic fiber and probiotic organisms are also protective.

Consume sea vegetables, seaweed salad, watercress, kim chi, raw sauerkraut or mead for...
further protection.

In addition, include regular and comprehensive physical stretching and walking the equivalent of 10,000 steps daily. Also include active mindfulness practices, such as meditation, to quiet concerns while increasing awareness and the ability to make more productive and effective decisions, backed by the will to persevere and succeed.

**Iodine: For whom, how much and how long**

If there is a known risk of radioactive iodine I-131 coming through the area, then before it reaches you and for a few weeks thereafter it makes sense to block uptake of iodine into the thyroid gland. This is a prudent protective strategy for acute situations. Blocking the uptake of iodine into the thyroid by flooding the system with non-radioactive iodine and iodide (iThroid™) is a helpful short-term, few-week strategy to avoid inducing hypothyroidism. A serving of sea vegetable such as nori or kombu at each meal is sufficient to provide 5-10 milligrams of iodine and iodide. If more than a short time consumption of enough iodide to suppress the thyroid gland, we suggest supplementing with 1 grain of desiccated thyroid or equivalent as T3 (cytomel™) daily. Prefer organically certified or contaminant free sea vegetables. Avoid artificially colored sea vegetables.

**Geiger counters to detect radioactivity**

If you are technical, a home Geiger counter is available to monitor the radioactivity in the immediate area of the Geiger counter sensor.

**Disclosure**

Dr. Jaffe is a physician and biochemist, cross-trained in Western and Eastern medicine as well as in mindfulness techniques. He is a Fellow of the Health Studies Collegium. He is also founding stakeholder in PERQUE Integrative Health and ELISA/ACT Biotechnologies. He takes the above supplements whose forms he helped pioneer. More information can be found at www.PERQUE.com, www.ELISAACT.com, as well as www.HealthStudiesCollegium.org.

Additional support:


Effect of natural beta-carotene supplementation in children exposed to radiation from the Chernobyl accident.

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Abstract

Attempts were made to evaluate 709 children (324 boys and 385 girls) who had been exposed long-term to different doses of radiation during and after the Chernobyl accident and had moved to Israel between 1990 and 1994. Upon arrival, all of them underwent a check-up for most common clinical disorders and were then divided into three groups according to their residences (distance from the reactor) and the level of irradiation exposure: no radiation, <5 Ci/m2, and >5 Ci/m2, respectively. Blood serum analyses for total carotenoids, retinol, alpha-tocopherol and
oxidized conjugated dienes in 262 of the children showed increased HPLC levels of conjugated
dienes, indicating increased levels of oxidation of in vivo blood lipids in children from the
contaminated areas. The levels were higher in girls than in boys. Some 57 boys and 42 girls
were given a basal diet with a diurnal supplementation of 40 mg natural 9-cis and all-trans equal
isomer mixture beta-carotene in a capsulated powder form of the alga Dunaliella bardawil, for a
period of 3 months. Blood serum analyses were regularly conducted before supplementation to
determine the baseline effect of radiation exposure to the children, after 1 and 3 months of
natural beta-carotene supplementation. After supplementation, the levels of the oxidized
conjugated dienes decreased in the children’s sera without any significant changes in the level
of total carotenoids, retinol or alpha-tocopherol. Other common blood biochemicals were within
the normal range for all tests and no statistical differences before or after supplementation of
beta-carotene were noted. High pressure liquid chromatography (HPLC) analyses for
carotenoids in the blood detected mainly oxycarotenoids, and to a lesser extent, all-trans beta-
carotene, alpha-carotene, but not 9-cis beta-carotene. The results suggest that irradiation
increases the susceptibility of lipids to oxidation in the Chernobyl children and that natural beta-
carotene may act as an in vivo lipophilic antioxidant or radioprotector.

Dietary and clastogenic factors in children who immigrated to Israel from regions contaminated
by the Chernobyl accident.
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Abstract
The authors evaluated the possible association between dietary history and plasma clastogenic
factors in children who immigrated to Israel between 1989 and 1993 from regions contaminated
by the Chernobyl accident. The authors compared questionnaire data about demographic
variables, dietary histories before and after immigration occurred, and health status with
clastogenic factor scores for 162 immigrants. Logistic regression analysis revealed a negative
association between clastogenic factor scores and frequency of consumption of fresh
vegetables and fruit among children < or = 7 yr of age during the post immigration period. Intake
of eggs and fish by boys who were < or = 7 yr of age prior to immigration was associated
positively with clastogenic factor scores. Consumption of fresh vegetables and fruits afforded
protection to the immune systems of children who were < or = 7 yr of age.