Radiation Protection Nutrition

Déjà Vu

Following the Chernobyl disaster in 1986, I wrote the first edition of *Radiation Protection Manual*. Concerns about the dangers of radiation – both ionizing and non-ionizing, are still present, despite plans for building more nuclear reactors, using spent uranium in weapons, and in spite of threats of building more nuclear weapons.

Things have not changed much since 1989. Contrary to what many people believe, radiation is far more toxic than any chemical, pesticide or other poisonous substance. Why? Any form of energy sufficient to break a chemical bond can produce free radicals. Ionizing radiation is sufficient to rip electrons out of their orbits. According to Dr. Ernest Sternglass, each electron emitted by a radioactive nucleus has several million electron volts of energy, "sufficient to disrupt millions of organic molecules in living cells. Thus, radioactive isotope which concentrate in specific organic (such as iodine 131 in the thyroid gland) are much more damaging than ordinary chemical toxins such as lead or teratogens such as thalidomide."


Next, radiation doesn’t go away quickly. It is not biodegradable like your everyday garbage. Instead, each radioactive substance has its own half-life, the time it takes for one half of it to disintegrate via emission of radioactive particles. This can occur inside your body if you breathe radioactive air, eat radioactive food or drink radioactive water.

Radioactive isotopes are dangerous because they emit radioactive products as they “decay” to a more stable mass and because certain isotopes tend to concentrate in certain organs. See chart. Inside the target organ, the isotope decays, causing cellular damage such as toxin production, enzyme destruction, cell membrane damage, DNA destruction, and abnormal cell division (inhibited, retarded or cancerous).

Here are half lives of common radioactive elements. Radioactive strontium (Sr 90) has a half life of 28 years. To find the full life of a radioactive substance, multiple its half life by 20. So strontium 90 will be around for 28 X 20 = 560 years. Plutonium 239 with its half life of 24,400, will be around for 500,000 years.

The isotope most feared is iodine 131 (I 131) which tends to concentrate in the thyroid gland and the ovaries. It has an eight day half life (560 day full life) which is a rapid decay rate but it also means that the iodine releases heavy doses of radioactivity. Radioactive iodine is especially dangerous to the unborn and to young children whose growth depends upon a healthy thyroid gland.

Also, children absorb other toxic metals, such as lead five times faster than adults until they are past the age of vie. (David L. Watts, M.D., “Prevalent of Lead in the Environment Threatens Children,” *Health Freedom New*, Oct. 1985)

It is important to know that the absorption of toxic substances is inhibited in well nourished children and adults, and increased in malnourished people, including those who eat processed (junk), commercial foods.

Microwaving is also very destructive ([http://www.litalee.com/shopexd.asp?id=182](http://www.litalee.com/shopexd.asp?id=182)). Why? Because the same enzymes, vitamins, mineral and amino acids that are busy forming your cells, running your body chemistry and producing energy are also involved in detoxifying the body and protecting it from the effects of radiation, toxic chemicals and pollution. For example, calcium inhibits the absorption of lead and prevents its deposition into bones and teeth. Radioactive iodine will not concentrate in a health thyroid gland containing the optimum amount of iodine. This is called the theory of selective absorption. It means that the body first absorbs whatever nutrient minerals it needs and if they are not there due to a junk food diet, the body will selectively absorb similar substances even if they are toxic or radioactive counterparts.
Radioactive iodine and other radioactive substances are absorbed into the body via breathing, ingesting foods and drinking water containing them. For example, milk-producing animals dine on grass laced with iodine 131 and other radioactive substances. These substances concentrate in them and then in the human body including the thyroid gland as we drink the milk and eat the meat.

IONIZING RADIATION – How ionizing radiation is concentrated in the human boy

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<tr>
<th>TARGET ORGAN</th>
<th>ISOTOPE</th>
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<tr>
<td>Thyroid gland</td>
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<td>Lungs</td>
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<td>Bone</td>
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<td>Muscle</td>
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Radiation, the Unborn and the Child

Dr. Sternglass documented the dangers of radiation to the unborn in his review article, “The Implications of Chernobyl for Human Health.” Dr. Sternglass shows graphs in his review article which strongly correlate cancer mortality, infant mortality and increases in underweight births with nuclear fallout. He lists four references which reported a decline in Scholastic Aptitude Test scores exactly 17-18 years after the onset of large-scale nuclear weapons tests in direct relation to the measured amount of iodine 131 in the milk.

It does not matter if the fallout is from a nuclear weapons test or from damaged nuclear reactors such as Chernobyl, Three Mile Island or the reactors in Japan.

What kind of legacy are we creating for our children in terms of optimum health and mental development when governments’ highest priority is a large nuclear industry with nuclear reactors on land, in space and in the ocean, food irradiators in every state, and nuclear weapons tests around the globe?

Children Born of women Exposed to Excess Fallout of Ionizing Radiation

These children have birth defects such as abnormal small heads, mental retardation and leukemia. Other scientists reported that many females whose mothers were exposed to radiation experienced a “superovulation.” These women were often in such a continuous state of pregnancy that by the age of 28, 10% of them chose surgical sterilization. In addition, many of these women also had poor general health as they approached their thirties. (Jim Sibbison, “Radiation and the Unborn,” Bestways, Jun. 1984, p.14 and references therein.)
Mothers; Nurse Your Babies

Nursing is especially important for babies exposed to low level radiation. Actually all babies are exposed to low level radiation. Breast-feeding counteracts radiation. Breastfed infants excrete more strontium 90 than they ingest and more than bottle-fed infants. This is because breast milk has a lower phosphorus level than cow milk and phosphorus increases the retention of strontium 90. (Elsie M. Widowson et al., “Absorption, Excretion and Retention of Strontium by Breastfed and Bottle-fed Babies,” Lancer, Octo.29, 1960)

The same is true for other toxins, such as PCB’s. Even though breast milk can contain higher levels of PCB’s than cow milk, PCB excretion is higher in breast-fed infants than bottle-fed infants. (Robert Mendelsohn, M.D., Health Express, July 1981, p.48).

Nutritional Protection from Radiation and other Environmental Toxins

We need to balance our body chemistry by restoring a healthy relationship with nature and all creatures of the earth. What makes our bodies get out of balance? How did we mess up our physiology, develop enzyme, vitamin, minerals and other nutrient deficiencies and set the stage for chronic degenerative diseases? In our technological evolution, we have lost our contact with nature and her rhythms. Sometimes we even believe that we are better than nature, that we can manufacture better foods, better organs, better everything.

Before the commercialization of agriculture, we maintained a harmonious cyclical relationship with the earth and its creatures. Not a single thing was wasted. The animals ate what man did not eat. Manure from the animals was mixed with green cuttings, weeks, egg shells, dirt and water and magically transformed into healthy compost. This organic compost nourished the soil so that year after year, the soil improved in quality. You can taste this quality in organically grown fruits and vegetables and in animal products from animals who are treated with love, fed organic foods and allowed to live in their natural habitat. People who eat this food do not get fat. It is difficult to overeat foods filled with so much nutrition. Animals who are raised humanely, fed organic foods and allowed to walk uncrowded on the earth do not develop the diseases observed in commercially raised animals.

Compare this to our linear, high-tech, modern life style. It’s the opposite of the natural cycle of life. It’s a one-way flow from the factory or store into the garbage or waste container. Little reverence or respect. Lots of consumption, pollution and depletion of our natural resources.

Compare the soil of organic farming to the soil of agribusiness farming. The latter is chemically fertilized, mechanically plowed and mono-cropped by agribusinessmen in air-conditions farm equipment. Commercial food tastes dead compared to organic food because it is dead, having been grown in dead soil. And look what’s happening to the dead soil. It’s disappearing—drying up, blowing away and becoming a wasteland.

And that’s not all. To make matters worse, here comes genetically modified organisms (GMOs) which threaten the entire future of our food. This information was released in 2001 from the Washington D.C. based Pure Food Campaign: “Genetic engineering breaks down the fundamental genetic barriers, not only between species, but between humans, animals and plants. This technology permanently alters the genetic code of living organisms by combining the genes of dissimilar and unrelated species into novel organisms that will pass their genetic changes on to their offspring. The possibilities of creating thousands of novel organisms over the next few years are enormous and frightening.”

“Scores of companies are now using the new gene-splicing technology to produce never-before seen combinations of vegetables, fruits, fish, poultry and farm animals. Cantaloupe and squash containing genes for bacteria and viruses, potatoes with chicken and wax moth genes, tomatoes with flounder and tobacco genes, corn with firefly genes, and fish and pigs with human genes, are just a few of the food products currently being developed and field tested.”
“The reasons for making these genetic changes have nothing to do with improving nutrition or taste. Rather, virtually all have been instituted to make processing more profitable, extend shelf life, allow for easier shipping, or allow crops to better withstand poisonous weed-killing herbicides - in other words, to make more money for major corporations.” “Genetic Engineering – Frankenfoods and More”

http://www.litalee.com/shopexd.asp?id=177

Blogs with information on GMOs


So now you know the answer to my question. How do we balance the body chemistry? It is much more than just taking synthetic vitamins, minerals and enzymes. We must establish reverence and respect for the earth and its creature, because whatever we do to help the earth and its creatures will help us. Whatever we lack, we have created by being out of balance with the earth – by eating dead, devitalized, commercially processed foods devoid of life and filled with agribusiness chemicals (pesticides, herbicides), GMOs, drugs given to animals, plus extremely inhuman agribusiness animal farm practices.

You can take vitamin A but do you really think that this is than answer to your health? Do you think that synthetic supplements can make up for what you are not eating? Instead, seek a more organic way of life. Support the organic and biodynamic food industry, especially locally.

Many health problems arise from eating dead, depleted, diseased foods. A healthy, well-nourished body is less susceptible to free radical damage from radiation (or any inflammatory substance) than an weak, unbalance body. Either we choose drugs which control body chemistry (with many side effects) or we give ourselves the nutrition which allows the body to self-heal and maintain health.

Drugs do work but their effects are uni-directional. They do not modulate your blood chemistry – raise or lower your glucose, cholesterol, etc. For example, insulin lowers blood sugar but the dosage must be
carefully monitored to prevent hypoglycemia. In addition, drugs have toxic side effects, sometimes worse than the condition for which they are being used.

Organic whole foods work differently from drugs. If organic whole foods are eaten, properly digested, absorbed and assimilated, homeostasis will be achieved and maintained. Thus, whole foods are **modulating** – they balance body chemistry up or down, depending upon what the body needs. These are complex metabolic processes. It amazes me that we think we can compete with these processes by eating processed foods and taking drugs.

Find out what you need: plant enzymes to digest foods, an organic prothyroid diet to support optimum thyroid function and hormonal balancing to correct the many problems arising from low thyroid function. Please visit my website at [www.LitaLee.com](http://www.LitaLee.com) to find out how to determine what enzymes, diet and hormonal balancing you need to become and stay healthy.

**Nutritional Protocol for a Healthy Body**

**Eat an organic prothyroid diet: Healthy Diet Rules Summary**

Avoid synthetic vitamins, minerals and isolated substances such as an isolated mineral. However, I strongly recommend taking Vitamin D3 (Cholecalciferol) from lanolin, not fish oil. Very few companies sell lanolin-based Vitamin D3. Country Life and Carlson’s do.

Avoid junk foods, refined foods, fast foods and fake foods, especially fake sugars (NutraSweet, Splenda or Sucralose, Saccharin, etc.).

Seek organic **whole** foods as best you can. Whole milk. The whole egg. Here is a list of foods to avoid or use very rarely: all gluten and high PUFA (omega-3 and -6 oils) foods which include seeds, nuts, nut butters, beans (except green), wheat, rye and barley. Raw seeds and nuts are even more toxic than roasted seeds and nuts because they contain protease inhibitors which stress the kidneys. Sprouted seeds contain various amounts of cyanide. Eating 100 grams of alfalfa sprouts can be lethal.

Organic oats, rice and corn are okay if you can tolerate them. Also, heirloom grains are good (spelt, quinoa, kamut, amaranth, etc.). Make sure the heirloom breads contain no PUFA.

Avoid PUFAs (all omega – 3 and -6 oils) which include all oils that are liquid at room temperature (such as flaxseed, fish oils, borage, Canola, and all seed, nut and bean oils, etc.). Avoid all foods containing PUFA such as most bread, most cereals, vegetable juices, etc. When you suck the juice from a vegetable, you get various amounts of toxic PUFA with no protection from the mother fiber. Fruits and potatoes are the only two foods that do not contain PUFA. Fruit juices are high in salicylates so it’s like drinking organic aspirin (very anti-inflammatory). Potatoes are the best vegan source of protein and have an excellent protein efficiency ratio.

I recommend using only coconut oil in your cooking and coconut water daily plus coconut milk. These are the healthiest fats you can eat and very prothyroid. Butter and Olive oil are healthy too, but coconut oil, by supporting good thyroid function and the immune system, is the best. I use Olive oil in salad dressings but not in cooking.

The best mineral sources are non-iodized **white** sea salt and coconut water. Avoid colored salts. The color is either dirt or toxins. For example, pink or orange color in Himalayan sea salt is toxic inorganic iron.

Avoid **raw** cruciferous vegetables – they must be **cooked** to destroy the thyroid inhibitors (goitergens). These include broccoli, cabbage, cauliflower, Brussels sprouts, kale, collard greens, Chinese broccoli, kohlrabi, bok choy, turnip root and greens and rutabaga. Fermenting cruciferous vegetables does not destroy the goitergens.

Seek **organic grass fed, soy-free** animal protein. Most chickens, turkey and pork are fed soy (in the U.S.)
even if they are labeled organic and free range. Same with eggs. Search for grass fed soy-free chicken eggs and grass fed chickens. It is easier to find grass fed beef, bison and lamb than grass fed poultry. Avoid farmed fish which are also fed soy, food coloring and drugs. Try to find raw or at least organic milk. Organic Valley is excellent. They have raw organic cheeses which are excellent. Organic goat milk and goat cheese are also fine. Avoid Horizons – they are not organic.

My dietary goal is: 4 oz (25 grams) organic animal protein 3x/d, fruits 3x/d, fresh fruit juices 3x/d, carrots daily, white sea salt on all foods and in juices, coconut oil as your main oil and Great Lakes Gelatin as the best protein powder. NOTE: this is the adult amount and would be less for a child.

Eat ripe fruits (except grapefruit) and drink fruit juices (except apple or grapefruit juices) daily. In a ripe fruit (bananas, pears, peaches, nectarines, etc.), the starch is converted into healthy sugars. Put white sea salt on your foods and in your fruit juices. I recommend organic coffee (not decaf) with milk, cream or ½ & ½. If you drink green tea, I recommend buying organic, fluoride-free Matcha green tea from Japan. Green, black and white teas absorb lots of fluoride from water, air and soil.

Do not drink water from plastic bottles. Not only do they contain endocrine disruptors, but many brands are tap water plus added synthetic vitamins/minerals and tons of plastic bottles are contaminating our oceans and killing our marine life.

I recommend a filter to remove fluoride and all the other impurities from your sink and your shower from Tim Hickey of Friends of Water (see below for address). Distillation and RO water purification methods are produce unhealthy water.

**Friends of Water**
Tim Hickey, owner
14618 Tyler Foote Road
#169
Nevada City, CA 95959
(360) 326-8834
(866) 482-6803
sales@friendsofwater.com

Carbonated water is good for you if it doesn’t contain fluoridated tap water (like Club Soda). My favorite brands include Perrier, Pellegrino, both of which are in glass bottles.

**Avoid These Foods and Avoid Microwaving**

PUFAs: Unsaturated oils, omega-3 and -6 oils (all liquid oils except olive oil): soybean, canola, fish, flaxseed, corn, seed, nut or bean oils, EPO, DHA, borage, called omega-3 &-6 oils, or “essential fatty acids” and all products containing them.

Vegetable juices (concentrates the PUFA toxic oils)

Vegetable shortening or margarine (partially hydrogenated oils)

Non-dairy creamers (Mocha Mix, soymilk, etc.)

Soy products (soymilk, soybeans, tofu, tempeh, soy protein, textured vegetable protein or TVP)

All protein powders (soy, whey and rice protein)

Fluoride - all sources: tap water, reconstituted beverages, beer from fluoridated areas, toothpaste, many drugs, commercial green tea

Refined carbohydrates (white bread, white rice, white sugar, white pasta, commercial cereals)
Refined sugars (white, fructose, brown, artificial syrups, etc.), candy bars, health food store energy bars (expensive junk), commercial desserts, soda pop.

Synthetic sugars: NutraSweet, Saccharin, Splenda (Sucralose), Neotame, etc.

RAW cruciferous (broccoli, cabbage, cauliflower, etc.) are goitergens. Must be COOKED to destroy thyroid inhibitors

Least healthy starches: seeds, nuts, nut butters, beans (except green), wheat, rye and barley – all contain gluten (storage proteins) and PUFA. More toxic when raw.

Sprouted seeds can have toxins, for example, cyanide in alfalfa and other sprouts.

Commercial (table) salt (sodium chloride). Avoid all colored salts, especially Himalayan salt (high in toxic iron).

Pork and deli meats (by-products of the meat industry. (Organic pork would be okay but try to find it!).

The Organic Pro-thyroid Diet link


Use plant enzymes to have optimum digestion of your foods

Here is an abstract from Chapter I of my book, The Enzyme Cure.

Who needs enzymes? Every body – babies, children, adults and older people, as well as your cat and your dog. Why does every body need enzymes? Because enzymes do the work required for all life processes. They come alive or are activated in the presence of moisture (water), the right temperature (your body temperature) and the right amount of acid or alkalinity. Each activated enzyme does work of a very specific kind. In other words, each enzyme has a job to do. It may be digestion of a certain kind of food. It may be the manufacture of a hormone. It may be keeping your blood clean and free of toxins. Your life, vitality and your health depend upon an adequate supply of enzymes.

Enzymes can be divided into three major categories: metabolic enzymes, pancreatic enzymes and food or plant enzymes.

- **Metabolic enzymes:** Hundreds of thousands of metabolic enzymes are made by the human body and are responsible for running its chemistry. These enzymes are involved in all physiological processes including breathing, thinking, talking, moving, behaving and immunity.

- **Pancreatic enzymes:** In addition to metabolic enzymes, the pancreas secretes about 22 pancreatic enzymes, including amylase, lipase and proteolytic enzymes, which continue the work of digesting food in the small intestine after plant enzymes have begun the digestive process in the stomach.

- **Plant (food) enzymes:** These are essential to the proper digestion of food. Present in all raw foods and as supplements, plant enzymes include protease (digests protein), amylase (digests carbohydrates), lipase (digests fat), disaccharidases (digest sugars) and cellulase (digests soluble fiber). Unlike pancreatic enzymes, plant enzymes work in the mouth and the stomach where they predigest foods. This is the secret of predigesting foods in the stomach with plant enzymes. Pancreatic enzymes work in the small intestine, not the stomach. Both plant and pancreatic enzymes work in the blood.

Using supplemental plant enzymes in addition to eating certain raw foods spares the pancreas from having to do 100% of digestion. This is why I use plant instead of pancreatic enzymes.
If you take plant enzymes with food and/or eat certain raw foods, these enzymes will predigest up to 60% of the carbohydrates, up to 30% of the protein and up to 10% of the fat in 30 to 60 minutes, before hydrochloric acid is secreted and before pancreatic enzymes have been released to the small intestines.

If you take enzymes on an empty stomach, they enter into the bloodstream and go to work there. Like little PAC men, these enzymes assist the immune system by digesting and disposing of toxins (any substance that does not belong in the blood) and eating (digesting) the coating of certain viruses, enabling immune system workers to then destroy them. Taking enzymes in this way can help reverse inflammatory conditions. Each type of enzyme has a specific anti-inflammatory action. Since plant enzymes digest toxins rather than killing them off as antibiotics do in the case of bacteria, this process causes no side effects if the digested toxins can be properly eliminated through the urinary tract, skin, colon, and lungs.

Enzymes are much more heat-sensitive than vitamins and are the first to be destroyed during cooking, pasteurization, canning, microwaving or heating above 118 degrees F. You can swallow pounds of vitamins and minerals, but without enzymes, nothing works and you are wasting your money.

Since whatever you do not digest becomes a poison, there is an enzyme link to most health problems. The Enzyme Cure presents 50 case histories describing 36 health conditions. A partial list includes:

- Digestive disorders - poor digestion/allergies
- Children's health problems
- The Pro-thyroid diet and hormonal balancing
- Female problems (PMS, menopause, infertility, menstrual irregularities, etc.)
- Male problems (benign prostatic hypertrophy)
- Stomach problems (gastritis, ulcers, acid reflux)
- Asthma, Bronchitis
- Constipation, Diarrhea
- Headaches
- Hypoglycemia (low blood sugar)
- Headaches
- Gallbladder problems
- Injuries (bruises, sprains, broken bones, tendonitis, disc problems)
- Insomnia

Here are some examples:

- Infant colic, sometimes accompanied by projectile vomiting can be supported with a multiple digestive enzyme called Thera-zyme DGST (digest).
- Thera-zyme Kdy is a primary allergy relief formula whether the allergen is dust, flowers, animals, air pollution or food. If more help is needed, DERM-H3 provides enzymatic antihistamine support. DERM-H3 is also excellent for skin manifestations (hives, herpes, rashes, bug bites, bee stings, poison oak/ivy and the itching that sometimes accompanies these conditions).
- Chronic diarrhea can be supported with an enzyme/herbal formula called IrB (irritable bowel).
- Chronic constipation can be supported with an enzyme/herbal formula called Thera-zyme LgI (large intestine).
- Stomach problems can be relieved with an enzyme/herbal formula, Thera-zyme Stm (stomach) in addition to avoiding gastric irritants.
- Thera-zyme TRMA (trauma).provides healing nutritional support of injury or of soft tissue trauma following surgery
• Thera-zyme Rsp provides nutritional support in people who may have lung problems such as coughing or wheezing.

• Thera-zyme Para is an enzymatic calcium formula that provides nutritional relief of calcium deficiency that may cause nocturnal leg cramps or a nocturnal cough.

• Thera-zyme Sym nutritionally supports the upper cervical vertebrae and helps hold chiropractic adjustments. Upper cervical problems can cause a variety of symptoms such as headaches, dizziness, nausea, indigestion, constipation and more.

For complete information on enzyme nutrition, see http://www.LitaLee.com or read The Enzyme Cure.

**Supplements/foods I do not recommend because they are anti-thyroid, pro-estrogen, unhealthy or toxic:**

**PUFAs** - Omega-3 and -6 oils, especially omega-3 (fish, DHA) (see large compendium with many references): flaxseed oil, EPO, borage, beta-carotene, lecithin, Canola, DHA, fish, soybean, safflower, EPO, phosphatidyl serine, EPA, sometimes called EFA or omega-3 and-6 oils.

**Estrogens** - natural, synthetic (Premarin), herbal estrogens (black cohosh, sage, pennyroyal, licorice); estrogenic foods (PUFA, soy products); xeno-estrogens such as fluoride.

**Raw** cruciferous veggies (goitergens = cause hypothyroidism). Fermenting cruciferous vegetables does not destroy the thyroid inhibitors which requires heating. I have never heard that sauerkraut has lost its goitrogen; I think it was an important cause of hypothyroidism in Eastern Europe which eats a lot of sauerkraut (Dr. Ray Peat). Cruciferous vegetables include broccoli, cabbage, cauliflower, radishes, kale and others.

**Iodine supplements** (Thyromin, Iodoral, sea veggies, ocean plant extract, kelp in large amounts, etc.) Note: 150 micrograms of iodine is a safe dose. In addition, Thyromin (Standard Process) contains adrenal and pituitary glandulars both of which can be unhealthy. Stimulating the pituitary can trigger tumors. Thyroid glandular is the only non-toxic and natural way to heal the adrenal glands.

**Supplements containing toxic excipients** such as silica and carrageenan.

**Vegetable juices including green foods** and all juiced vegetables (Vitality Greens, Green Foods) – very high in PUFA. Note: veggie powders are dried veggie juices (including the green foods) which are high in PUFA.

**Soil Based Organisms** – may contain fulvic acid. Fulvic acid is an extract from sewage (waste water) and peat. Fulvic acid can be very high in iron which is toxic if in excess.

**Seeds, nuts, nut butters, colored beans (except green), wheat, rye and barley** - the least healthy starches because of the PUFA and the glutens in these foods. Sprouting seeds can cause the formation of cyanide, especially alfalfa sprouts.

**Apple Cider** – high in pectin and potentially high in fungal toxins. Applies to apple cider vinegar. Also apple juice is high in pectin. Do not consume apple cider vinegar. Instead consume rice vinegar (my favorite is Marukan seasoned for salads).

**Fluoride** (in water, commercial foods, toothpastes, reconstituted beverages and black or green teas). Green tea is a fluoride sink and many green tea vendors brag about the amount of “beneficial fluorides” in their green teas. Buy Matcha green tea only from Japan. Carbon filters don’t remove fluoride. Best filter for fluoride is ion exchange from Friends of Water. Distilled and RO water are not healthy.
Synthetic vitamins, minerals, isolated amino acids can contain anti-thyroid substances such as PABA, PUFA’s, iron, etc. Chelated minerals (with amino acids) – some of these are very toxic, especially glutamates and aspartates (excitatory amino acids which can cause seizures).

Melatonin (raises estrogen, lowers thyroid and progesterone, carcinogenic). Melatonin creates stupor, raises estrogen and is thus anti-thyroid and carcinogenic. Melatonin is a hormone made in the pineal gland from the amino acid tryptophan. As we consume tryptophan in our food during the day, the body converts it into serotonin. Serotonin, in turn, is converted into melatonin. This conversion occurs most efficiently at night. (Dr. Ray Peat)

Tryptophan and 5-HTP (carcinogenic and converts to serotonin). Whey protein is unbalanced in tryptophan so I don’t recommend it. The SSRIs (Prozac line of drugs) raise serotonin and are very toxic. St. John’s Wort also raises serotonin.

Colloidal silver and other colloidal minerals (from Dr. Ray Peat)
Metal ions are the form normally absorbed; the whole nonsense about colloidal metals is just a sales pitch. And toxic metals are toxic. Silver nitrate was popular for about 100 years, then mercurchrome, then merthiolate, and thimerosal. The organic compounds of some of these metals are the most toxic forms. All silver is very toxic, and the colloidal form wouldn’t kill germs if it weren’t very active chemically. It isn’t as toxic as mercury, but few things are. It’s slightly less toxic than lead.

Antacids (all of them) – can predispose to stomach cancer, interferes with calcium metabolism, prevents digestion of protein and much more. Because of the lowering or inhibition of stomach acid, these drugs can create a favorable environment for H. pylori, a stomach bacterium that is associated with stomach cancer. In long term animal studies, these drugs caused an increase in stomach cancers and are therefore not recommended for long term use. Additional adverse effects: unusual bleeding or bruising; diarrhea; skin rash or itching; abdominal or stomach pain; increased or decreased appetite; nausea; anxiety; cold or flu-like symptoms; constipation; increased cough; depression; muscle pain; rectal bleeding; male breast enlargement; chest pain; dizziness and other symptoms. Since these antacids lower or inhibit stomach acid, they adversely affect the digestion of protein because there is less acid to convert pepsinogen into pepsin, a proteolytic enzyme that digests protein.

In addition, antacids decrease calcium absorption which also requires a certain amount of acidity for absorption. A Canadian study has confirmed that using drugs to treat reflux enormously increases the chances of having osteoporosis and a hip fracture -- by nearly five times after several years of taking the drugs. Losec, Prevacid, Nexium, Pantoloc and Pariet are the most recent, most powerful, and most problematic of these drugs; but Zantac and other first generation proton-pump inhibitors are only somewhat less dangerous because they are less effective. Source: Pubmed.com research article numbers: 18695179, 15729198, 17201221, 15628717; (NaturalNews, 10/10/08 by Russel Johnston), www.NaturalNews.com Calcium (and other important mineral) absorption is also inhibited by consuming soy products (with the exception of soy sauce) so if you have gastric problems and eat soy, you are in trouble!

Testosterone, DHEA (from Dr. Ray Peat): Testosterone converts to estrogen very easily, especially if you have any inflammation (who doesn’t?). A dosage of 5 mg is A VERY POTENT dosage, even for a man. Testosterone is one step worse than DHEA, which can also convert to estrogen, but testosterone does it more easily. Testosterone does have anti-estrogen effects FOR AWHILE. But, in time, your thymus will be destroyed (by both estrogen and testosterone). In addition, if you are female, you will grow hair on your face and your chest, and your voice will PERMANENTLY become more masculine (deeper or lower). It is true that testosterone and DHEA build up bones but they are dangerous. Dr. Ray Peat’s 10% oral progesterone in natural vitamin E oil by Ray Peat) supports normal function and structure in people prone to osteoporosis without toxic side effects. Thyroid glandular is the other natural food that helps stimulate both bone formation and resorption (getting rid of old bones). Pregnenolone is converted into a safe amount of DHEA so this is the recommended source. (Dr. Ray Peat).

The only hormones or hormone precursors I recommend are thyroid glandular, progesterone and pregnenolone.
**Pesticides/Insecticides/GMOs etc** in commercial foods or used in the house or outside
For GMOs please see links above.

**Many metals** including mercury, silver, cadmium, iron (except food-based), etc.

Most people are aware that mercury, silver and cadmium are toxic but many do not know about the toxicity of excess inorganic (not food-based) iron. Here they are:

- Hypothyroidism
- Chronic Fatigue
- Cirrhosis of the liver
- Diabetes
- Arthritis
- Gout
- Sexual Dysfunction
- Infertility
- Early menopause
- Depression
- Memory loss
- Immune system suppression
- Cancer
- Stroke
- Alzheimer’s disease
- Parkinson’s disease
- Lou Gehrig’s disease

*Coffee and baking soda will prevent most iron absorption, but using enough milk and cheese in the diet prevents the iron overload that can come from some other foods and iron-containing supplements such as pink or orange Himalayan sea salt.* (Dr. Ray Peat)

Regarding mercury: *The form of the mercury is very important in determining its toxicity. Since mercury kills fish at a fairly low concentration, contaminated fish aren’t a source of silver toxicity for humans. The most common sources of mercury are silver amalgam fillings (about 50% mercury) and also the mercury (Thimerosal) in vaccinations. Since mercury kills fish at a fairly low concentration, contaminated fish aren’t a source of silver toxicity for humans.* (Dr. Ray Peat).

Here is a safe way to remove mercury: *Plenty of fruit juice and milk will do it slowly but safely. Moving mercury around in the body doesn’t seem like a good idea. Coffee, orange juice and milk will gradually lower the heavy metals without any sudden shifts.* (Dr. Ray Peat).

**How to find out which enzymes you need**

I use the Loomis 24-hour urinalysis to determine enzyme and nutritional needs and these tell me which of the Thera-zyme enzymes are indicated for each person.

The 24-hour urinalysis according to Loomis is a non-medical test to determine enzyme and nutritional deficiencies. Do not confuse this test with the 24-hour urinalysis test that is done by medical doctors to determine kidney function, or with the Reams urinalysis test, which is based on a single random catch and varies widely according to whether the person has recently eaten. Urine samples collected every two hours will be significantly different. Everything changes: the pH, specific gravity, calcium content, and so on. This test is not a medical diagnostic test.

In this discussion, food intolerance means poor digestion or food sensitivity.
The Loomis method requires collection of all urine produced in 24-hours. These fluctuations are averaged to give a complete picture of digestion, absorption and assimilation of foods. Looking at a Loomis 24-hour urinalysis is also a sneaky way of peeking at the blood (the ECF or extracellular fluid). Why? The blood holds nutrients it needs and dumps what it doesn’t want into the urine. If a substance should be in the urine but isn’t there or is low, we know the blood needs it and has kept it. Conversely, sometimes we see higher levels of substances in the urine than should be there, plus things that shouldn’t be there at all (abnormal solutes). This tells us that the blood has dumped them. The blood also takes what it needs from the cells. In fact, cells will sacrifice themselves to the blood in order to maintain homeostasis. Also, the blood dumps what it doesn’t want into cells. So, if we see no-no’s in the urine, we know that these same no-no’s are also in the cells.

This test is prognostic rather than diagnostic. In other words, you can predict what lies ahead if you do not clean up your diet and digestion act. Enzyme deficiencies lead to deviations in the normal physiology characterized by inflammatory conditions. If left untreated, these conditions may lead to diseases. The Enzyme Cure describes the enzyme connection to many health conditions.

Here is a summary of what the Loomis urine test reveals:

**The urinary pH:** When a healthy person eats, the urine becomes alkaline from the alkaline tide, the body’s method of dumping alkalinity to compensate for HCl losses during digestion. In a healthy person, a first morning urine is very acidic because of the prior eight hours of fasting during sleep. The acid reserves are then released during the first meal and the urine then becomes alkaline. In a 24-hour volume, the average pH range in a healthy person is from 6.3 to 6.7. Most people are more acidic (lower pH) than 6.3, while fewer are more alkaline (higher pH) than 6.7. Of the two, it’s better to be more acidic than alkaline because the body has more buffer systems to handle excess acidity than excess alkalinity. The further from normal the 24-hour pH is, the more potential problems. For example, excess alkalinity leads to calcium metabolism problems, anxiety, immune dysfunction and symptoms associated with protease deficiency.

On the other hand, excess acid reserves mean not enough alkalinity is present to activate pancreatic enzymes in the duodenum.

**Specific Gravity compared to Volume:** The normal 24-hour volume should be greater than 800 ml and less than 2400 ml with an optimum range of 1200 to 1800 ml. Five cups is equivalent to 1182 ml and 8 cups to 1892 ml. Urine volume is partly determined by hormonal balancing and partly by fluid intake. Forced liquid intake is not healthy. The kidneys can only handle about 1/2 cup an hour, so its better to sip than to glug!

You can determine the kidneys’ ability to concentrate urine or lack of it by comparing the urine volume to the specific gravity. By comparing the specific gravity to the volume, we can determine the following. Remember, these tests are in a nutritional, not a medical setting.

**Polyuria:** (excess urine volume above 2400 ml) may mean the patient is drinking too many liquids, eating a junk food diet, taking diuretics, or has allergies, underactive adrenals or is hormonally imbalanced.

**Oliguria:** (inadequate urine volume of less than 800 ml) may mean the patient is not drinking enough liquids, is dehydrated, has overactive adrenal glands, impaired circulation (edema), or is recovering from fever, vomiting or diarrhea.

**A high specific gravity with a high or normal urine volume:** indicates the presence of abnormal solutes such as glucose (diabetes), protein (kidney disease) and so on. Which solutes can be determined by looking at the Chemstick, described below.

**A low specific gravity with a low or normal urine volume:** indicates difficulty concentrating the urine. This means that the kidneys are not cleansing the blood due to a congested lymphatic system. This can produce swollen glands, allergy, low back pain, frontal headaches, and nausea. In women, these may worsen during menses or pregnancy, and may lead to vomiting during either time. There is a special
enzyme formulation for this, which contains enzymes plus herbs, which nourish the kidneys and help relieve lymphatic congestion.

**Chlorides:** The normal person will dump chlorides to compensate for excess acid reserves or hold chlorides to compensate for excess alkaline reserves. Thus, normally we should see a low (acid) pH with high urinary chlorides or a high (alkaline) pH with low urinary chlorides. There are common variations of these patterns. For example, people can become potassium deficient because of a junk food diet or taking diuretics. This produces an acid pH with low chlorides and polyuria. This can also occur in a person who is salt deficient.

**Calcium:** Of all the nutrients measured in the urine, the calcium level is the hardest to correct because of the many requirements of calcium metabolism, including normal pH, adequate protein digestion, proper hormonal balance plus certain vitamins and minerals. Most of the patients I test are low in calcium, including those who eat organic whole foods and take calcium supplements, especially hard pills. The only way to maintain adequate calcium is to eliminate refined foods which have been stripped of most nutrients, optimize digestion of calcium-containing foods and balance the endocrine (hormonal) system.

**Vitamin C:** Vitamin C is a threshold substance, meaning it is not excreted until the ascorbic acid level in the blood exceeds a certain value related to the degree of tissue saturation. Vitamin C deficiency is very common in people who eat refined foods, women during pregnancy and lactation, children, immune suppressed people and people with many diseases. The most common results of this deficiency include fatigue, joint pain, bleeding gums and adrenal exhaustion.

Most people confuse ascorbic acid and ascorbates with vitamin C. They are not the same. Ascorbic acid is the antioxidant portion of the vitamin C complex. Many people who take megadoses of ascorbates show severe vitamin C deficiency in this test. The enzyme formulas for vitamin C contain a food source of vitamin C and very little ascorbic acid or ascorbates. I have seen severe vitamin C deficiencies corrected in days with this enzyme formula.

**Indican:** The indican level tells the degree of colon toxicity due to poor digestion. The higher the indican, the greater the need for colon cleansing and food enzyme therapy. Partially digested food (from poor digestion) may directly enter the blood causing allergic reactions, or remain in the colon where it putrefies (rots), forming a group of toxic phenolic substances called indican. Although the undigested food never goes back into the blood from the colon, the indican does and must be detoxified by the liver. But the liver can’t detoxify all of the indican. What is not detoxified passes through the kidneys and can be measured in the urine. The higher the indican level, the worse the potential problems, such as gas, diarrhea, constipation, halitosis, incompetent ileocecal valve, hiatal hernia, skin problems, breast pathology, sciatica and even serious health problems. Dr. Ian Immerman found over 100 different conditions associated with high indican levels. While the indican should be low, a zero indican is not good because it indicates severe sugar intolerance - undigested sugar interferes with the indican test.

**Sediment:** The sediment test can help determine the multiple digestive enzymes needed. A normal 24-hour urine has about 1/2-ml of sediment, the "ash" resulting from digestion, absorption and assimilation of foods. A normal sediment is calcium phosphate, the result of carbohydrate metabolism. Malabsorption, decreased cell permeability and sugar intolerance reduce the sediment, sometimes to a trace or to zero. A high sediment means poor use (assimilation) of food and may indicate fat and/or protein intolerance. Urinary sediment increases with fat or protein intolerance due to the presence of oxalates (fat intolerance) and uric acid (protein intolerance) in addition to the phosphates normally present.

In addition to enzyme formulas for fat, protein and sugar intolerance, there is a multiple digestive enzyme for maintenance in adults with good digestion, and a formula to help relieve gastric irritation, including ulcers.

**Abnormal Solutes:** This is the only part of the urinalysis test that is routinely done in a pathology lab. A chemstrip is dipped into the urine to check for abnormal solutes such as glucose, blood, protein, bilirubin,
nitrites (bacteria), leukocytes (pus) and so on. This test is very important for me because it tells me when I should refer an individual to a medical doctor for a medical diagnosis.

**What if you don’t do the Loomis 24-hour urine test?**

You can still take digestive enzymes. There are dozens of brands. I only use the Thera-zyme line of plant enzymes. Here is a list of Thera-zyme multiple digestive enzymes. You can pick an enzyme or two that fits your digestive problem if you know what it is.


**Thera-zyme DGST** (Digest) (caps or powder): A pediatric multiple digestive formula for digestive problems and colic in babies. Comes in caps or in powder form.

**Thera-zyme HCL** (contains no hydrochloric acid): A multiple digestive enzyme formula for difficulty digesting sugar, protein and fat intolerance. For people who may be low in hydrochloric acid. Contraindication: gastric problems. People with gastric problems cannot tolerate high doses of protease with foods.

**Thera-zyme PAN** (Pancreas): A multiple digestive enzyme for people who are sugar intolerant (have difficulty digesting sugars) or eat excessive amounts of sugar - cane sugar (sucrose), grain sugar (maltose) and milk sugar (lactose). May have environmental sensitivities.

**Thera-zyme Stm** (Stomach): Multiple digestive enzyme for people who have gastric problems (acid reflux, GERD, ulcers, frequent heartburn, etc.) and need to nourish the lining of the gastrointestinal tract. People with gastric problems can find relief by avoiding certain starches (carbohydrates) in descending order which are: seeds, nuts, grains (especially gluten), beans, bread and pasta. The safest grains are rice, corn and oats but not everyone can tolerate these. Potatoes are okay. Try eliminating or rarely eating seeds, nuts, grains (especially gluten - wheat, oats, rye and barley), beans, bread and pasta to begin with and see what happens. The storage proteins in seeds, nuts and beans have a very similar toxicity to the toxicity of the gluten in grains.

**Thera-zyme VSCLR** (Vascular): A multiple digestive enzyme for people who have trouble digesting fat and have health problems resulting from severe lipase deficiency such as high blood pressure, high blood sugar and weight problems. The enzyme connection to gallbladder problems, gastric problems and diabetes is lipase. Also for headaches at the temples.

**What is a summary of the things you should eat and take:**

These are all equally important. Don’t think that you can take enzymes or anything and get away with a junk food diet!

An organic, whole foods, prothyroid diet

Multiple digestive enzymes to optimize your digestion

**Vitamin D3 from lanolin** (not fish oil). I recommend 4000 – 6000 iu daily.

**Adequate hormonal balancing** with thyroid glandular, natural progesterone and pregnenolone

**What if the plume hits us? What should we do?**

Be sure you have adequate thyroid glandular. Also, I recommend taking 1/4th tsp of kelp daily but ONLY WHEN the radioactive plume hits you and not otherwise. I would do this for my children as well.
Radiation Network to see radiation levels anywhere

Welcome to RadiationNetwork.com, home of the National Radiation Map, depicting environmental radiation levels across the USA, updated in real time every minute. This is the first web site where the average citizen (or anyone in the world) can see what radiation levels are anywhere in the USA at any time (see Disclaimer below). http://www.radiationnetwork.com/

Have HOPE, do not be afraid!

We must eradicate from the soul  
All fear and terror of what comes  
out of the future.

We must acquire serenity  
In all feelings and sensations  
About the future.

We must look forward  
With absolute equanimity to everything  
That may come. And

We must think only  
That whatever comes is given to us  
By world direction full of wisdom.

It is part of what we must learn  
In this age,  
Namely to live our of pure trust,

Without any security in existence,  
Trustig in the ever present help  
Of the Spiritual World.

Truly, nothing else will do,  
If our courage is not to fail,  
Let us discipline our will.

And let us seek the awakening from  
Within ourselves  
Every morning and every evening.

- Rudolf Steiner

I wrote this message in 1985 when I wrote the Radiation Protection Manual  
It is still very true today, so many years later:

This is a message of hope, dedicated to the children of the world, or most precious resource, our promise for a better tomorrow. It contains gifts from nature which afford natural protection from radiation, chemicals and other free radical pathology. Read this and do not be afraid.

Many blessings to you and to your loved ones,

Lita Lee