**Iodine**

Disclaimer – This information is for educational purposes only it is not intended to be used as medical advice. Get educated and study the facts before making any dietary changes. The reader is responsible for both the health benefits as well as the consequences that many result from following any health regimen. If in doubt, consult a health practitioner.

Iodine the safest trace element

Of all the elements essential for human health, iodine is the least understood and the most feared. Yet, iodine is the safest of all the essential trace elements. It is the only one that can be administered safely in high doses for long periods of time, as long as one understands how to adapt the dosage to his or her needs. Every individual is unique and will therefore require different amounts.

Why most people deficient in iodine

Iodine is perhaps the easiest mineral to wash out of the soil. Some scientists have postulated that the reason our farm soils have no iodine is because most of it washed down to the ocean as the waters receded following the flood of Noah. That could explain why iodine is found in sea vegetation and not in fruits and vegetables grown on the land.

According to the Bible, people historically lived to be hundreds of years old prior to the flood, but immediately thereafter, life expectancy was cut to less than a hundred years in most cases. Could the secret lie in the fact that iodine and other minerals were washed out of the soil by the flood?

Since iodine is primarily only found in the ocean or “deep earth” mines, diets lacking in ocean fish and sea vegetables is another major reason for iodine deficiency. Next would be low iodized salt diets, followed by high carb diets, especially diets with a lot of bakery products, bread and pasta. Lastly is vegan/vegetarian diets. Animals that are supplemented with iodine will pass that iodine onto meat eaters. Vegan diets on the other hand provide little to no iodine.

Dr. Brownstein, author of Iodine: Why You Need It, Why You Can’t Live Without It, along with doctors Ng and Nusbaum tested over 6,000 patients and found approximately 96% were iodine deficient. These figures are consistent with results of other researchers, Dr. Jorge Flechas and Charles Hakala in their worldwide iodine tests.

Dr. Brownstein recommends what is called a loading test when testing for iodine deficiency, which is taking 50mg of iodine and collecting all of the urine over the next 24 hours to see how much iodine is excreted. A person will be considered iodine sufficient if 90% of the iodine is excreted. If less than 90% of the iodine is excreted, that constitutes an iodine deficiency. In other words, someone who is deficient will absorb and retain most of the iodine.

Iodine deficiency increases the risk of cretinism, mental impairment, reduced intellectual ability, goiter, deafness, infertility, delayed physical and mental abilities, ADHD, SIDS, Multiple Sclerosis, myelin disorders, and various cancers including breast, prostate, endometrial, and ovarian. (Stadel, 1976)

Cretin describes a child born and raised with severe mental disabilities, small stature and weakness, all due to not enough Iodine in the mother’s diet when she was pregnant.

Studies show that iodine deficiency is the leading preventable cause of mental disorders. Even moderate deficiency lowers intelligence by 10 – 15 IQ points.

Iodine deficiency is a significant public health problem in 129 countries. Iodine deficiency is the world’s greatest cause of preventable mental retardation. (WHO)

According to Dr. Gerald Burrow, a former dean of Yale’s medical school, “For 5 cents per person per year, you can make the whole population smarter than before”. Simply by adding iodine to the salt supply.

In 1923, Dr. Marine did a study in Michigan and Ohio where 2190 students were supplemented with 9mg of iodine per day for 2.5 years and a control group of 2305 students received no supplementation. The supplemented group had .2% (two tenths of one percent) incidence of goiter while 22% of the control group produced goiters.

Following that study iodine was added to salt at the rate of 77mcg (.077mg) per gram of salt. The average salt intake is 5g per day, which translates to 385mcg of iodine. However, 24 hour urine tests show iodine levels to be 5x lower than the 385mcg intake, which indicates that the iodine in salt only has about a 10% bioavailability.

A study was done in 1969 where two groups were supplemented with 750mcg of iodine daily. One group received iodized salt and the other group received iodized bread. Blood serum tests for the iodized bread group showed 18.7mcg of iodine per liter of blood and the iodized salt group only had a serum level of 1.7mcg per liter. (Pitman, 1969)

The National Health and Nutrition Examination Survey (NHANES) did a study from 1970 to 2012. They reported that iodine levels dropped by 50% over a period of 42 years. They also reported that moderate to severe iodine deficiency increased more than 450% from 1970 to 2000.

Iodine has successfully been used to treat the following list of illnesses, which should be a good indication of the pandemic nature of iodine deficiency:

ADHD/ADD

allergies

atherosclerosis

autoimmune disorders

bacterial overgrowth

brain fog

breast diseases including cancer

breast pain

bronchitis and pneumonia

cancers

coughs

chronic fatigue

constipation

depression

Dupuytren’s contracture (causes fingers to be permanently bent)

eczema

excessive mucous

eye problems

GERD

fibrocystic breasts

fibromyalgia

fibroids

gastroparesis (stomach cannot empty normally)

genito-urinary diseases

goiter

gum infection

hair thinning

headaches and migraines

heart arrhythmia

heavy metal poisoning (mercury, lead, arsenic)

hemorrhoids

high cholesterol

hypertension

hypothyroidism

infections

kidney disorder / nephrotic syndrome

keloids (a scar that is lumpy and larger than the wound)

liver diseases

malaria (48 hours)

menstrual irregularities

mental retardation

mucous

multiple sclerosis

obesity

ovarian disease & ovarian cancer

parasites

parotid duct stones (calcium stones that form in the saliva ducts)

Peyronie’s disease (fibrous scar tissue that causes deformation of the penis)

prostate disorders & prostate cancer

psoriasis (raised, red, scaly patches of skin, which often itch or burn)

restless leg syndrome

rheumatism / arthritis

scarlet fever (bacterial infection that begins as strep throat)

sebaceous cysts

small intestine bacterial overgrowth

stomach pains

syphilis

thyroid disorders including cancer

tonsillitis

type 2 diabetes

uterine fibroids & uterine cancer

vaginal infections

Etc, etc!!!

Could iodine be a silver bullet against disease that has been purposely obscured to enrich the so-called health care industry?

At one time, iodine was the remedy of choice in every hospital, every doctor’s office and every home medicine cabinet. Today, the only place that iodine is frequently used to treat disease is in veterinary clinics. Why do you suppose that is? Because animals have to be cured quickly and inexpensively, otherwise a pound of hamburger would cost you $60.

According to Lynne Farrow, author of The Iodine Crisis, iodine was the first treatment of choice for tumors and aggressive diseases of obscure origin during the 19th century. Farrow also says that the notion that refined iodized salt meets our daily needs for iodine is a dangerous misconception. According to the research of both Farrow and Brownstein, the amount of iodine in salt far too low and less that 10% of it gets absorbed by the body and many people today avoid refined salts due to their doctors saying it is bad for cardiovascular health.

The RDA given for iodine is 150mcg (micrograms, which equals 0.15mg). This amount may be able to prevent goiter, but it certainly is not enough to provide iodine for 37.2 trillion cells outside of the thyroid that all need iodine to function properly.

Seafood no longer a viable source of iodine

You would need to eat approximately four pounds of fresh seafood daily in order to meet your body’s total need for iodine, but much of the world’s marine life has been contaminated as a result of nuclear disasters at Fukushima, Three Mile Island and Chernobyl, not to mention radiation fallout from 2,053 nuclear explosions conducted from the 1940s to the 1990s and depleted uranium munitions illegally used in recent America’s wars.

Why is Iodine Supplementation Recommended Following a Nuclear Disaster?

Radioactive iodine kills the thyroid gland and people who are deficient in iodine readily absorb iodine from the environment, so when a radioactive cloud passes by, radioactive iodine is sucked up into the thyroid gland to fill up its iodine stores.

CDC Website Recommends Potassium Iodide for Radiation Poisoning

(Quote)

The FDA has approved KI (potassium iodide) to be taken by anyone exposed to radioactive iodine.

Tablets come in two strengths, 130mg and 65mg. The tablets have lines on them so that they may be cut into smaller pieces for lower doses.

Each milliliter (mL) of oral potassium iodide liquid contains 65mg of iodide.

According to the FDA, the following doses are appropriate to take after internal contamination (or likely internal contamination) of radioactive iodine:

Newborns to 1 month of age should be given 16mg.

Children from 1 month to 3 years of age should take 32mg.

Children between 3 and 18 years of age should take 65mg.

Children 150 pounds or greater should take the full adult dose, regardless of age.

Adults should take 130mg.

Women who are breastfeeding should take the adult dose of 130mg.

A single dose will only protect the thyroid gland for approximately 24 hours. If you were exposed for more than 24 hours, public health officials may tell you to take additional doses 24 until danger of exposure has passed. The exceptions would be if you are pregnant, breastfeeding or a newborn infant. (End Quote)

Hopefully, you will already be taking adequate amounts of iodine from safe sources prior to an emergency to protect your thyroid against radioactive iodine.

What exactly does iodine do in our cells?

Generally speaking there are two different forms of iodine; iodide and elemental iodine. Iodide is a compound that is created by combining iodine with a salt, such as potassium. Iodides are transported into the thyroid cells by a transport molecule called the sodium iodide symporter or NIS. After iodide enters the cell, it undergoes two important processes; oxidation and organification.

Oxidation

Oxidation effectively converts iodide to iodine. This process requires hydrogen peroxide (H2O2), thyroperoxidase (TPO) and NADPH; activated by calcium and inhibited by delta-iodolactone.

High doses of iodide can potentially damage the thyroid gland

If production of hydrogen peroxide in the body is insufficient to oxidize the iodide, taking high doses of potassium iodide can be dangerous and can lead to damage of thyroid tissue and to the forming of antibodies against thyroid peroxidase, a hyperthyroid condition called Hashimoto’s disease. One element crucial in the process of oxidation is selenium; another trace element most people are deficient in.

Iodine vs. iodide

ShopFreeMart PureDine is pure nascent or elemental iodine. It has no need to be symported into the cells and no need to be oxidized to be converted into iodine. Elemental iodine can be used by the cells without any other chemical reactions necessary.

Organification

The next step in the utilization of iodine is called organification, which means that iodine becomes part of cholesterol, fats and proteins and it takes about a hundred times the RDA of iodine to produce proteins like delta-iodolactone, which regulates cell death called apoptosis and cellular growth, both of which are implicated in the formation of cancer. Iodolactone also keeps hydrogen peroxide in check. This is a critical factor because too much H2O2 damages tissues and causes an autoimmune response like Hashimoto’s or Graves’ disease.

Organification is Dose-Dependent

RDA – 150mcg of iodine per day. This is barely enough to prevent goiter.

100X RDA – 15mg of iodine daily is required to make iodo-lipids (delta-iodolactone) needed for cell apoptosis and for the regulation of H2O2.

12-50mg of iodine daily is sufficient for a vast majority of adults, but according to Dr. Brownstein you can take up to 100mg a day.

Halogens

Iodine belongs to a group of chemicals on the periodic scale called halogens or halides, which includes fluorine, chlorine, astatine and bromine. All halides have a similar chemical structure and compete with iodine for binding and absorption into the iodine receptor sites.

In the 1960’s, flour and milk were both fortified with iodine, which had a positive effect upon human health, but ten years later, iodine was removed from both flour and milk and bromine was added to flour to replace the iodine. This was one of the greatest health blunders of all time, or was it? By 1970, those who owned and controlled Big Pharma were also in control of the FDA and AMA.

They obviously knew that the body will substitute bromine for iodine to make T4 hormone when iodine is deficient. Furthermore, brominated T4 is fake and cannot be used by the thyroid, which means that you can still be hypothyroid even if T4 tests can show that you have plenty of T4 hormone. Follow the money!

Bromine is an endocrine disruptor and bromine toxification is associated with delirium, psychomotor problems, retardation, schizophrenia and hallucinations. Ingesting bromine can make you feel dull, apathetic and make concentrating difficult. Bromide can also cause severe depression, headaches and irritability. These symptoms can be present even with low levels of bromine in the diet.

Bromine is found in flour products including bread, pasta, bakery goods, carbonated drinks, juice drinks, processed foods, medications, tap water, swimming pools, hot tubs, plastics, upholstery, carpets, fire retardants, etc. A hot car in the summertime is off gassing bromine and doors and windows should be opened for a few minutes before getting inside to allow the bromine to dissipate.

Chlorine is another dangerous halide with broad exposure due to it being used to disinfect tap water, sewage and industrial waste. It is used in the production of paper and cloth as a bleaching agent. It is used in cleaning products, including household bleach. Chlorine is also used in the preparation of chlorides, solvents, pesticides, polymers, synthetic rubbers, and refrigerants.

When chlorine enters the body as a result of breathing, swallowing, or skin contact, it produces acids in the body which are corrosive and which damage your cells on contact. Furthermore, chlorine blocks the uptake of iodine in the body.

Fluoride is another halide that is prescribed as a medicine to prevent tooth decay. Among other things, fluoride blocks iodine from getting into the receptor sites of your brain cells.

Michael Connett, an attorney with the Fluoride Action Network (FAN), shares some important facts about fluoride that everyone drinking or showering in fluoridated water should know:

(Quote) There have been over 34 human studies and 100 animal studies linking fluoride to brain damage, including lower IQ in children, and studies have shown that fluoride toxicity can lead to a wide variety of health problems, including:

Increasing absorption of lead

Disrupting synthesis of collagen

Reducing thyroid function

Deactivating 62 enzymes and inhibiting more then 100 others

Inhibiting formation of antibodies

Increasing genetic damage and cell death

Increasing tumors and cancers

Damaging sperm and causing infertility

CAUSING:

Hyperactivity

Lethargy

Muscle Disorders

Thyroid disease

Arthritis

Dementia

Bone fractures

Bone cancer (osteosarcoma)

Immune system dysfunction

According to a 500-page scientific review, fluoride is an endocrine disruptor that can affect your bones, brain, thyroid gland, pineal gland and even your blood sugar levels.

Fluoride supplements have not been approved by the US Food and Drug Administration (FDA) for the prevention of tooth decay. In fact, the fluoride supplements that the FDA has reviewed have been rejected.

Fluoride is added to drinking water to prevent a disease (tooth decay) and as such becomes a medicine by FDA definition. Water fluoridation is a form of mass medication that denies you the right to informed consent.

So with fluoridation, we are adding to the water a prescription-strength dose of a drug that has never been approved by the FDA. (End Quote.)

The good news is that iodine supplementation in the proper amounts increases urinary excretion of halides such as fluoride, bromide and chlorine derivatives, as well as heavy metals such as cadmium, aluminum, lead and mercury.

Dr. Brownstein explains that bromine and fluoride are goitrogens, which means they promote the formation of goiters. Bromine is a carcinogen and it binds to iodine receptors in the breast. Women with breast cancer have considerably larger amounts of bromine and fluoride than women without breast cancer. Iodine on the other hand has anti-carcinogenic properties.

Cancer – Cancer is a result of mutated cells. Iodine is critical for the P53 gene which prevents damaged cells from dividing. Iodine and selenium helps P53 do its job of eliminating abnormal cells. Cancer patients have used 50 – 300mg of Iodine per day successfully.

Iodine proponent, Dr. Bob DeMaria says, “Iodine is not just for the thyroid gland. It is for breast tissue and ovaries in women and testicles in men. It turns off the gene that promotes cancer. Apoptosis is limited cell life. Iodine keeps cancer cells in check.”

Iodine expert Dr. Edward Group says that women who take 3 to 4 milligrams a day of iodine for a period of 3 to 4 months may experience fibrocystic changes including seeing breast cancer disappear. He goes on to say that if people have sufficient levels of iodine inside their body that they are not likely to ever have heart disease, cancer, diabetes, thyroid dysfunction, infertility, polycystic ovaries or breast disease because they are all linked to iodine deficiency.

Dr. Brownstein explains that all of the glands of the body depend on adequate iodine levels to function optimally. Iodine is responsible for maintaining normal architecture of the thyroid, ovaries, uterus, breast and prostate. Animal studies have shown iodine deficiency to affect the adrenal glands, the thymus gland, the ovaries, the hypothalamus and pituitary axis, as well as the entire endocrine system. Ovaries in women and testicles in men have the second highest concentration of iodine.

Dr. Flechas says, “All hormone receptors are dependent on iodine, which increases the sensitivity of the receptor to the hormone it is designed for. For example it can increase the sensitivity of insulin receptors and thus help with diabetes. Similarly, it can increase the sensitivity of the receptors for neurotransmitters such as serotonin, dopamine and gabba in the brain. Thus depression may lift after taking iodine. It can also increase the sensitivity of the receptors for testosterone and FSH and LH, which is why some people are cured of diabetes by taking iodine supplements and also why iodine cures low libido and hypothyroidism.”

Iodine deficiency leads to an imbalanced hormonal system. In fact, a balanced hormonal system is impossible without an adequate intake of iodine.

Iodine deficiency leads to cystic tissue (fluid filled), to nodular (firm), to hyperplasia, to cancer. It generally takes 3-6 months of iodine supplementation to improve or reverse cysts, nodules, or disrupted glandular tissue architecture and it may even take years in severe cases.

Iodine is also stored in the salivary glands, choroid plexus that produces cerebrospinal fluid in your brain, gastric mucosa, breasts, ovaries, prostate and the ciliary body of the eye, which controls the shape of the lens. In the brain, iodine concentrates in the substantia nigra, the area of the brain most associated with Parkinson’s disease.

Medical ‘iodo-phobia’

One of the world’s leading iodine researchers, Dr. Guy E. Abraham says that ‘medical iodophobia’ which is the unwarranted fear of recommending and using iodine – may have caused more human death and suffering than both World Wars combined. This fear has also prevented meaningful clinical research in the daily amount of iodine needed for optimal physical and mental health.

Dr. Abraham suggests a daily value (DV) of 13mg of iodine to maintain iodine sufficiency for the whole body. Other doctors are recommending as much as 30-50mg of iodine for their patients.

In order to function, the thyroid gland itself needs approximately 6mg of iodine per day and the breasts need at least 5mg of iodine, which leaves only 2mg of iodine for the rest of the body if you are taking 13mg daily. That is a far cry from the 150mcg (.15mg) recommended by the medical establishment.

In total, the body holds about 1,500mg of iodine, with a maximum of 50mg being held in the thyroid gland. Twenty percent of the iodine in your body is found in your skin and if your skin is depleted of iodine, you will not be able to sweat. Thirty two percent of your body’s iodine stores are in your muscles and if muscles are depleted, pain and other fibromyalgia like symptoms can develop. Dr. Flechas says, “Women who have fibrocystic breast disease repeatedly have told me when they take iodine to get rid of the fibrocystic breast pain, the muscle pain [fibromyalgia] disappears also.”

Is it possible that the FDA and American Medical Association are using misinformation to purposely prevent a majority of people from taking enough iodine to keep them healthy?

Many healthcare professionals are scared of iodine due to what they are taught in medical schools. They’ve been led to believe that iodine causes hypothyroidism, when in reality the opposite is true. One of the reasons for this misconception is due to the fact that both hypothyroidism and iodine therapy increase thyroid-stimulating hormone (TSH) levels. (TSH is a test to monitor thyroid function.)

Dr. Brownstein explains THS from his own experience

TSH has another function besides stimulating thyroid hormone production. It also helps stimulate the body’s production of the iodide transport molecules – the sodium-iodide symporter (NIS). Without adequate amounts of NIS, iodides like potassium iodide could not enter the cells and be utilized.

People who consume no iodide have no need for NIS. People who consume a small amount of iodide need only a small amount of NIS. However, when individuals begin to supplement with potassium iodide, suddenly there is need for NIS to transport the extra iodide into the cells. In order to accomplish this, the body will increase the production of TSH in order to produce more NIS.

How long does TSH stay elevated?

Brownstein says that TSH may increase from the normal ranges of between 0.5 to 4.5mlU/L up to between 5 and 30mlU/L. They may remain that high for up to six months before falling back to the normal range.

Iodine does not cause hypothyroidism. On the contrary, the main thyroid hormones, T4 and T3, require ample iodine in order to be produced. Thyroid hormone is essential for normal brain development in newborns and when it is deficient we see mental retardation, goiter, lowered IQ, autism and still birth.

Thyroid hormone stimulates mitochondria to produce ATP (energy). Low thyroid hormone means low mitochondrial stimulation, which translates to low levels of ATP, fatigue, brain fog, fibromyalgia and muscle aches and pains.

When an individual is iodine-deficient, hypothyroidism results due to there not being enough raw material to produce T4 and T3. Supplementing with iodine can improve or even heal hypothyroidism without the use of synthetic drugs.

The thyroid is your body’s engine, and iodine is the battery – when you’re low on iodine, everything slows down. But, there’s good news. T3 and T4 hormones help regulate your energy levels, mental clarity, memory, mood, metabolism, weight, and everything in between. Iodine supplementation will most often produce and balance these hormones.

Thyroid hormone therapy

Research suggests that supplemental thyroid hormone can increase iodine deficiency. Dr. Brownstein reports that taking thyroid hormone when a person is already deficient in iodine increases the risk of breast cancer and possibly other cancers as well. Therefore, it is prudent to prevent doing anything that lowers the body’s iodine stores or increases the body’s need for iodine. Your doctor may not know this, so if your doctor is prescribing thyroid hormone, you need to be aware of the possible dangers of having too little iodine in your system while taking thyroid hormone.

Another misconception about iodine

Doctors are taught that iodine is contraindicated in autoimmune thyroid diseases such as Grave’s disease and Hashimoto’s. However, research does not support this notion, as iodine levels have fallen in the past 40 years while autoimmune thyroid disorders have risen (opposite outcome expected). Lack of iodine actually increases the risk of developing antibodies against the thyroid gland and causing Hashimoto’s. (See Dr. Brownstein’s book for studies.)

Conventional approaches to autoimmune thyroid

Anti-thyroid drugs (Propylthiouracil, Methimazole) to block production of thyroid hormone.

Radioactive iodine to kill the thyroid gland.

Thyroidectomy (surgical removal of the thyroid gland.

Diet

Autoimmune disorders are examples of excess oxidative stress in the body. Oxidative stress can be reduced with hydrating water, anti-oxidants, unrefined salt, nutrients and gluten-free, non-GMO diet high in non-starchy vegetables, low carbohydrates, low in sugary fruits (fresh fruits in season), moderate amount of proteins (.5g of protein per pound of body weight – 75g of protein per 150 pounds) and moderate amount of fats (no trans-fats) pure olive oil (USD Certified Extra Virgin) and coconut oil being the best and no processed foods or refined sugars. Get plenty of rest and take a few minutes several times daily to breathe deeply.

Is there a condition when iodine is actually dangerous?

Yes, but it is extremely rare. Dr. Brownstein shares this in his book:

(Quote) I was taught in medical school that iodine therapy causes hyperthyroidism, especially in patients suffering from Graves’ or Hashimoto’s disease. Young doctors-in-training are still taught this today. In over 12 years of practice, my partners and I treated thousands of patients with iodine and less than 10 of them became hyperthyroid.

When I lecture to doctors, l tell them one particular condition can predispose to iodine-induced hyperthyroidism. This condition occurs in a patient who has an autonomously functioning nodule in their thyroid. Sometimes this is referred to as a hot nodule on a thyroid scan.

A hot nodule is operating independently of the pituitary, the hypothalamus and the thyroid gland and therefore, when iodine is present, these nodules can take up the iodine and produce copious amounts of thyroid hormone leading to hyperthyroidism. This condition can be diagnosed with a thyroid scan, however it is most frequently diagnosed when a trial iodine therapy is given and the patient becomes hyperthyroid after taking the first couple of doses.

How do you treat a patient with a hot thyroid nodule? These patients must avoid iodine supplements and marine food (such as seaweed) that is high in iodine UNTIL the nodule is surgically removed. (End Quote)

Weight Loss

The single biggest cause of obesity in the world today is lack of iodine. If you have tried everything but iodine to get the weight off and you still can’t get it off, then I have good news for you. Iodine will help you do just that.

Another reason for not being able to lose weight is a fatty or sluggish liver. ShopFreeMart Activate can help remove fat from the body, including from the liver. Doing 3 to 4 liver cleanses is recommended. A typical liver cleanse will restore the liver by approximately 15%.

Suggested Iodine Usage

The cost of iodine is so low that money is seldom the issue. Take enough iodine to supply the needs of all of your cells. As mentioned above, the RDA for iodine barely provides enough to prevent goiter. It does not provide nearly enough for the entire body. Adults need from 12-50mg per day, however, start with one drop daily and gradually work up to the optimum dose, because iodine is going to begin pulling toxins like bromide and fluoride out of your cells. Children’s doses should be adjusted according to age and weight.

Type of Iodine:

Nascent Iodine (preferred): This form of iodine holds an electromagnetic charge that releases a large amount of energy when consumed. It’s regarded as the most absorbable form of iodine because it closely resembles a precursor of thyroid hormone, so your thyroid can use it quickly and more efficiently. When cells have low voltage, they cannot reproduce. Pure nascent iodine found in ShopFreeMart PureDine greatly helps to increase cellular voltage.

Kelp: Kelp is a plant-based form of iodine, but the rate at which it absorbs is dependent on how well it’s digested. Studies indicate that much of the available kelp today is contaminated with hazardous chemicals like bromine, arsenic, mercury, and radioactive iodine, so be sure of your source if using kelp.

Potassium Iodide: This form of iodine comes in tablet form. It’s an inorganic form of iodine. This form of iodine cannot be used by the body without the help of the sodium iodide symporter or NIS which transports iodide into the thyroid. A deficiency of NIS when taking potassium iodide can lead to damage of the thyroid tissue and a condition called Hashimoto’s disease. Selenium is a crucial element in this process, so when taking iodide be sure to supplement with selenium.

Each drop of ShopFreeMart PureDine contains 1.8mg of nascent iodine. You can use the following table as a rough guide for computing dosage: