

Iodine Deficiency

An Under-Recognized Epidemic

By David Brownstein, MD

I have been involved in the iodine project for seven years. During this time, iodine has consistently provided the most satisfying clinical results as compared to any other nutrient. To date, my partners and I have tested nearly 5,000 patients for iodine levels. Our results show that more than 96 percent of patients tested have low iodine levels with the vast majority being severely iodine deficient. I believe iodine deficiency is occurring at an epidemic rate across the United States. The consequences of iodine deficiency are severe: mental retardation, lowered IQ, attention deficit hyperactivity disorder (ADHD), infertility, thyroid problems, and cancer of the breast, prostate, ovaries, thyroid and uterus.

Unfortunately, a lot of misinformation exists about iodine. People are afraid to use iodine because of unsubstantiated rumors about this nutrient. This article, excerpted in part from my book, *Iodine Why You Need It, Why You Can't Live Without It*, is written to provide the reader with the correct information about iodine so that the reader can make an educated decision about whether to supplement with this important nutrient.

For more than 100 years, iodine has been known as the element that is necessary for thyroid hormone production. However, it is rare to see any further mention of iodine's other effects. Iodine is found in each of the trillions of cells in the body. Without adequate iodine levels, life itself is not possible.

Iodine is not only necessary for the production of thyroid hormone, it is also responsible for the production of all of the other hormones of the body. Adequate iodine levels are necessary for proper immune system function. Iodine contains potent antibacterial, antiparasitic, antiviral, and anticancer properties. Iodine is also effective for treating fibrocystic breasts and ovarian cysts. Table 1 lists some of the many benefits of iodine and some of the conditions that would benefit from adequate iodine supplementation.

Approximately 1.5 billion people, about one-third of the earth's population, live in an area of iodine deficiency as defined by the World Health Organization. Iodine deficiency disorder can result in mental retardation, goiter, increased child and infant mortality, infertility, and socioeconomic decline.¹ Iodine deficiency disorder is the most common preventable form of mental retardation known.

Iodine is a relatively rare element, ranking 62nd in abundance of the elements of the earth. Iodine is primarily found in seawater in very small quantities and solid rocks (usually near the ocean) that form when seawater evaporates. Iodine can also be found in sea organisms, such as seaweed. In fact, seaweed is one of the most abundant sources of iodine because seaweed has the ability to concentrate a large amount of iodine from the ocean water.

Iodine is not very abundant in the earth's crust.² It is estimated to be about 0.3-0.5 parts per million. In fact, it is in the bottom third of the elements in terms of abundance.²

If the soil has adequate iodine levels, the crops grown on that soil will contain adequate iodine levels. Conversely, deficient iodine levels will be found in crops grown on iodine-deficient soil.

There are naturally occurring non-radioactive and radioactive forms of iodine. Radioactive iodine can be used in medicine to diagnose and treat certain illnesses, particularly illnesses of the thyroid gland.

Commercially available non-radioactive iodine primarily comes from several sources: Chilean Saltpeter, seaweed, and brine water in oil wells. The action of the waves from the ocean can make iodine gas. Once airborne, iodine can combine with water or air and enter the soil. Non-radioactive iodine can enter our food system in a variety of ways. First, plants can take up iodine from the soil. Second, airborne iodine can land on fresh water supplies and, finally, airborne iodine can land on the ground, combine with salt, and become iodized salt.

Radioactive iodine can enter the air from reactions in nuclear power plants or explosions of nuclear materials. Radioactive iodine has been associated with certain types of cancer including thyroid cancer and certain blood cancers. Children are more susceptible to radioactive iodine since they have smaller thyroid glands, and they will receive a proportionately larger radioactive dose than an adult when they are exposed to radioactive iodine. Radioactive iodine damage can be prevented by the ingestion of non-radioactive inorganic iodine.

Where Is Iodine Found in the Body?

Every cell in the body contains and utilizes iodine, but iodine is concentrated in the glandular system of the body. The thyroid gland contains a higher concentration of iodine than any other organ. Large amounts of iodine are also stored in many other areas including the salivary glands, cerebrospinal fluid and the brain,³ gastric mucosa, choroid plexus, breasts, ovaries, and the ciliary body of the eye. In the brain, iodine concentrates in the substantia nigra, an area of the brain that has been associated with Parkinson's disease. Iodine is essential for the normal growth and development of children. Severe iodine deficiency can result in severe mental deficiency and deafness (i.e., cretinism). In addition, spontaneous abortion, as well as delayed physical and intellectual development is associated with iodine deficiency. Attention deficit/hyperactivity disorder (ADHD) is also related to iodine deficiency (see chapter 10 of my book).

Conversely, too much iodine can be a problem. In rare cases, excess iodine (i.e., doses greater than 1 gram/day) has been associated with hyperthyroid symptoms.

How Much Iodine Do You Need?

Now that you can see the body's needs for iodine and what happens when iodine is deficient, the next logical question is, "How much iodine do I need to take?"

The best way to ascertain how much iodine you need to take is to figure out the body's iodine status. Iodine levels can be checked in the blood, serum or urine. The most accepted test is the urinary test. I believe the best test to measure iodine levels is the iodine loading test.

My mentor on iodine, Dr. Guy Abraham, developed the iodine loading test. This test can be ordered here. It is done by ingesting 50 mg of iodine and collecting 24 hours of urine. By measuring the amount of iodine excreted in the urine, you can ascertain the iodine status of the body. Our research has shown that healthy people have approximately a 90 percent excretion. Therefore, if they ingested 50 mg of iodine in 24 hours they will excrete approximately 45 mg and retain 5 mg. The more ill one is, generally the lower the excretion rate. In essence, if one is very ill, their body will be calling for more iodine and they will excrete less during the loading test. In this case, they will retain a large portion of the loading test and their excretion rate will be lower than 90 percent.

Having an iodine loading test performed can help guide you in the proper dosing of iodine. My experience has shown that most adults will do well taking iodine in the range of 25-50 mg/day. Children need lower doses and can be dosed appropriately based on their size. My experience has shown that a healthy individual taking 50 mg of iodine/day will achieve iodine sufficiency in approximately 6 months.

However, 50 mg/day of iodine in an individual ill with a serious illness such as cancer or an autoimmune disorder may be insufficient to meet their needs. My clinical and laboratory experience has shown that ill individuals generally need more iodine as compared to healthy individuals. At 25-50 mg/day of iodine, it may take years for an ill individual to become iodine sufficient. In these cases, I

TABLE 1. Therapeutic Actions of Iodine and Conditions That Can Benefit From This Crucial Nutrient

Therapeutic Actions

- Antibacterial
- Anticancer
- Antiparasitic
- Antiviral
- Elevates pH
- Mucolytic Agent

Conditions Treated With Iodine

- ADD/ADHD
- Atherosclerosis
- Breast Diseases
- Dupuytren's Contracture
- Excess Mucous Production
- Fatigue
- Fibrocystic Breasts
- Goiter
- Hemorrhoids
- Headaches and Migraine Headaches
- Hypertension
- Infections
- Keloids
- Liver Diseases
- Nephrotic Syndrome
- Ovarian Disease
- Parotid Duct Stones
- Peyronie's
- Prostate Disorders
- Sebaceous Cysts
- Thyroid Disorders
- Vaginal Infections

sometimes recommend increased dosages of iodine. I do not recommend anyone dose iodine on their own. The best results are found when working with a holistic health provider who is knowledgeable about iodine. Furthermore, the best results are found by using iodine as part of a comprehensive holistic regimen that includes balancing vitamins, minerals, and hormones.

When undertaking an iodine supplementation program, it is important to use iodine from a reputable company. A reputable company should be able to verify the contents of its products. Iodoral[®] is one such product that has been properly studied and verified. Iodoral is a tableted iodine product. Its use has stood the test of time. I have been using Iodoral in my practice for more than seven years and found consistently positive results with it.

Final Thoughts

There is so much misinformation about iodine. It is important for you, the reader, to do your own research and come up with your own conclusions about iodine. Once you understand the importance of this vital element, you will understand why it is crucial to ensure adequate iodine levels in you and your family.

Iodine deficiency is occurring at epidemic rates. I have no doubt that this deficiency is responsible (at least in-part) for the epidemic of cancers of the breast and prostate as well as thyroid disorders. My clinical experience has clearly shown that it is impossible to treat these disorders as well as other chronic illnesses such as autoimmune diseases without ensuring adequate iodine intake.

Remember, the best results are achieved when working with a skilled health care practitioner who is knowledgeable about iodine. More information about iodine can be found in my book, ***Iodine Why You Need It, Why You Can't Live Without It***, available here.

References

1. Manner, M.G., et al. Salt Iodization for the Elimination of Iodine Deficiency. International Council for the Control of Iodine Deficiency Disorders. 1995.
2. Modern Nutrition in Health and Disease, 9th Edition. Williams and Wilkins, 1999.
3. Adrasi, E. Iodine concentration in different human brain parts. Analytical and Bioanalytical chemistry. November 13, 2003.

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