

Dosages of oral lodine

By Dr. Mark Sircus

After testing over 500 patients, I found that 94.7% of my patients are deficient in inorganic iodine.

Dr. David Brownstein

There are several reference points we can use to plot out iodine dosages for a variety of disorders that beg for the use of iodine for successful treatment. In this chapter I will present different views and practices from present as well as from the long past when iodine was vastly more popular as a medicine than it is today. For whatever irrational reason, doctors and patients fear iodine thus en mass do not use to its fullest potential. Humans tolerate large doses of iodine but the ultra high doses that were used many decades ago are not required to get the most out of iodine therapy. Just a little goes a long way, as the governmental iodized salt programs showed but this dosage level was only affective for Goiter and its avoidance. It actually takes very little iodine to prevent this disease but no one ever said that was the only purpose and need for iodine in the body. Today people are more deficient then ever before because our need for iodine has increased in direct proportion to our toxic burdens especially of other competing halogens. So effective is iodine that aerosols can be effective in sterilizing a room at levels not even detectable by humans. But Dr. David Derry of Canada says that, "Dietary iodine found in iodized salt is below the amounts needed to fill mucus defence roles. To protect themselves, people wishing to boost their defence against infections should supplement their diets with iodine."

"Extremely high doses of iodine can have serious side effects, but only a small fraction of such extreme doses are necessary to kill influenza viruses," continues Derry who tells us, "In 1945, a breakthrough occurred when J.D. Stone and Sir McFarland Burnet (who later went on to win a Nobel Prize for his Clonal Selection Theory) **exposed mice to lethal effects of influenza viral mists. The lethal disease was prevented by putting iodine solution on mice snouts just prior to placing them in chambers containing influenza viruses."**

Dr. Derry is one of several MDs that I refer to as the lodine Doctors. Dr. David Brownstein said, "After testing individuals and finding low iodine levels, I began to use smaller milligram amounts of iodine/iodide (6.25mg/day). Upon retesting these individuals 1-2 months later, little progress was made. I therefore began using higher milligram doses (6.25-50mg) to increase the serum levels of iodine. It was only with these higher doses that I began to see clinical improvement as well as positive changes in the laboratory tests. Why would people need the larger doses of iodine? Why have iodine levels fallen 50% in the last 30 years? As I pondered these questions, I came to the conclusion that the toxicity of modern life must be impacting iodine levels. It is well known that the toxic halides, fluoride and bromide, having a similar structure as iodine, can competitively inhibit iodine absorption and binding in the body. Because of the elevated levels of toxic halides in the environment and in the food supply, iodine levels have not only fallen but larger amounts of iodine are necessary to



correct iodine deficiency as well as to promote a detoxifying effect of heavy metals." I have suggested that people put iodine into a nebulizer for aerosol treatment for transdermal effect into the lung tissues in the case of lung cancer, emphysema, asthma and tuberculosis. I make the recommendation to do the same with magnesium chloride, sodium bicarbonate and glutathione. It seems obvious that iodine would make the ideal first line of defence in influenza prevention and without doubt in the treatment of both swine flu and regular influenza. Iodine, teamed up with these other primary and very necessary substances, offers an exceptionally strong defense and treatment against viral infection. It certainly is better than the antiviral Tamiflu, which only reduces symptoms by only one day. It is really not hard to beat that. Some physicians I know are also using chlorine dioxide as an agent for treatment either transdermally or intravenously applied but I would never use it for the prevention of anything. Though I have heard some success stories about chlorine dioxide I do not use it myself nor for my children. I always will reach for the iodine first for all the things that chlorine dioxide proponents advocate, for the iodine is much safer for oral usage, especially when used in the right form. The body needs iodine anyway as a fundamental nutritional item but when even heavier guns are needed instead of reaching for a pharmaceutical one can think of chlorine dioxide.

A function of iodine in the human body relates to clear thinking. The mind simply works better when the body is supplied the iodine it needs and studies do show that iodine deficiency leads to decline in IQ.

Despite its being critical to normal neurocognitive development, a new study finds that only 51% of US prenatal multivitamin brands contain any iodine, and in a number of randomly selected brands, the actual dose of iodine contained in the supplements did not match values on the labeling. It is easy to understand a synthetic pharmaceutical being phased out but to have iodine, an essential nutritional element that doubles as a super effective full spectrum antipathogen, ignored for what it can do is not reasonable.

Dr. Michael B. Schachter says, "The treatment dose when a person is iodine insufficient is generally between 12.5 mg and 50 mg daily. Preliminary research indicates that if a person is iodine insufficient, it takes about 3 months to become iodine sufficient while ingesting a dosage of 50 mg of iodine and a year to become iodine sufficient while ingesting a dosage of 12.5 mg of iodine daily. However, the patient needs to be monitored closely with awareness of possible side effects and detoxification reactions." This is quite a bit of iodine and if his statements can be substantiated then most people are using dosages which are much too low. In fact if we put our attention on the full iodine story, which collides with the fluoride, mercury and bromide story we conclude that we can only err on the side of too low of a dose. Patients should push their dosages higher and higher until they get the desired result but I recommend doing this slowly unless there is little time as is the case in emergency situations or very late stage cancer. When using the Nascent Iodine one can dose pulse every two hours orally taking each individual dose up to as many as 20 drops and even at this level we are no where near points of iodine toxicity and tolerance. I have given my own three year old up to fifteen drops in a dose when she was confronted with



fever and infection. When treating life threatening diseases we do not have months to fool around with low dosages. We need to zoom up iodine levels quickly. And we need to get it concentrated to certain tissues or organs. Just to give you an idea of how high iodine dosages have been taken to we have to revisit the 1930s when iodine was still a universal medicine, present in the US Pharmacopeia and was used at much higher dosages than anyone even dreams of using today.

The usual dose for treatment was 300 mgs (46 drops of full strength Lugol's) to 1 gm (1000 mg, 154 drops). It is very important to realize that today's Lugol's is not universally the same as it was because of new federal legal requirements about concentration levels. The best company offers Lugol's at varying concentration levels. (2.2, 3 and 7 percent) *Preoperative before thyroidectomy: Lugol solution 5-10 drops three times daily or 2-6 drops twice or three times daily given 10-21 days prior to surgery has been used. MedlinePlus*

Dr. Schachter wrote," Dr. Abraham started this Iodine Project around 1998 when he became aware of the many benefits of treating patients with iodine using doses far beyond the 2 mg a day, which most physicians consider to be potentially toxic. He noted that starting in the 1820s, the French physician Jean Lugol used these higher doses to treat a wide variety of conditions. Dr. Lugol combined elemental iodine (5 %) and potassium iodide (10%) with 85 % water. Since iodine kills infectious agents, Dr. Lugol successfully treated many infectious conditions with this solution, which became known as Lugol's solution, and which is still available today. Prior to World War II, many American and European physicians used Lugol's solution to treat thyroid conditions, using doses higher than 2 mg daily without apparent significant adverse effects."

When you look at mainstream recommendations all the above information seems strange but this is because dosage and RDA are set obscenely low. Note instead of talking in milligrams (mg) the RDA is in micrograms (mcg) which is a scale exactly 1000 times less. Meaning it takes 1000 mcg to equal 1 mg and it takes 1000 mg to equal a gram. Recommended Daily Allowance (RDA): 50mcg daily for infants 0-12 months; 90mcg daily for 1-8 years; 120mcg daily for 9-13 years; 150mcg daily for 14-18 years. Adequate Intake (AI) for infants:110mcg daily for ages 0-6 months; 130mcg daily for 7-12 months. Tolerable Upper Intake Levels (UL): 200mcg/day for ages 1-3 years; 300mcg/day for 4-8 years; 600mcg/day for 9-13 years; 900mcg/day for 14-18 years (including pregnancy and lactation).

Radiation emergencies: Potassium iodide (KI) should be taken just prior to, or as soon as possible after exposure. For infants, babies, and children, KI is administered for exposure of 5 centigrays (cGy) or more. For birth through 1 month, 16mg can be administered; for 1 month through 3 years, 32mg can be administered; for 3-12 years, 65mg can be administered; for adolescents ages 12-18 years, 65mg can be administered (or up to 120mg if the adolescent is approaching adult size).

The highest dosage I have heard any doctor using today is 100 mg and that is quite a bit when you take iodine in a form where you can taste and appreciate what you are taking into your body. Dr. Abrahams recommends taking 50 mg of lodine/lodide as Lugol's solution (8



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drops) daily for 3 months as a loading dose. Lugol's solution is available online at varying concentrations. Then his recommendation is that dose should be gradually reduced to the 12.5 mg (2 drops) maintenance dosage under the supervision of a knowledgeable health care professional.

Dr Abrahams feels that 14 to 15 mg. of iodine/iodide daily is the upper maximum of safety for long term use. This is close to Dr. James Howenstine's (another prominent iodine advocate) recommended dose of 12.5 mg daily. In 1953 Dr. Orian Truss discovered the devastating effects of antibiotics in an Alabama (USA) hospital. During a hospital round Truss was intrigued by a gaunt, apparently elderly man who was obviously dying. However, he was only in his forties and in hospital for four months. No specialist had been able to make a diagnosis. Out of curiosity Truss asked the patient when be was last completely well. The man answered that he was well until six months before when he had cut his finger. He had received antibiotics for this. Shortly afterwards he developed diarrhea and his health deteriorated. Truss had seen before how antibiotics cause diarrhea. It was known that Candida was opportunistic and thrived in debilitated patients, but now Truss wondered if it might not be the other way round, that Candida actually caused the debilitated condition. Truss had read that potassium iodide solution could be used to treat Candida infestation of the blood. So he put the patient on six to eight drops of Lugol's solution four times a day and soon the patient was again completely well. Soon afterwards he had a female patient with a stuffy nose, a throbbing headache, vaginitis and severe depression. To his amazement all her problems immediately cleared with Candida treatment. When I was coming to closure on this chapter I happened to talk to Dr. Brownstein. We were in total agreement about dosages. Our consensus extended to the proposition that the sicker the patient the more iodine they would need with most average patients needing 25 to 50 mgs with 12 mg being a good maintenance dose though of course this varies with the quality of ones diet and with ones location. Living near the beach has its health advantages but in no case should one depend on iodized salt for their needs.

Dr. Brownstein said he was using 200 to 300 mg with his prostate and breast cancer patients with those who have metastases needing the highest dosages. He also uses both Lugol's and Nascent reserving the Nascent for his more sensitive patients. There are the tablet form of varying dosage, which are used by more than several of the iodine doctors I know.

lodine is needed in microgram amounts for the thyroid mg amounts for breast and other tissues, and can be used therapeutically in gram amounts. Dr. David Miller

Antibiotics

A great feeling of security for a parent comes from administering a medicinal like iodine. It is what I give my children instead of dangerous antibiotics when they are sick. It is what I use when the first symptoms of flu approach and it does spare one the worst of that misery. After we understand that iodine is an excellent antiviral, antibacterial, anti fungal, mold and yeast agent we begin to glimpse the catastrophic mistake made for substituting pharmaceutical antibiotics for iodine.



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Antibiotics do not kill yeast but they certainly can kill people on occasion.[1] Not only do some antibiotics increase the risk of sudden cardiac death but sometimes they lead to liver compromise and failure. Despite the ever-widening use of antibiotics the National Center for Infectious Disease and the Centers for Disease Control announced that the U.S. death rate from infectious disease increased by more than 50% between 1980 and 1992, making it the third leading cause of death.

Studies have documented the association between increased rates of antimicrobial use and development of resistant infections thus doctors who prescribe antibiotics irrationally should be rebuked. There is a growing consensus among infectious disease specialists, epidemiologists and control experts from the U.S. and Europe about the dark side of antibiotic use. In the right form iodine is every mother's cherished medicinal heavyweight because it can save a child where antibiotics, often today, will not.

According to several studies, obstetricians and gynecologists write 2,645,000 antibiotic prescriptions every week. Internists prescribe 1,416,000 per week. This works out to 211,172,000 prescriptions annually in the United States, just for these two specialties. Pediatricians prescribe over \$500 million worth of antibiotics annually just for one condition, ear infections. Yet topical povidone iodine (PVP-I) is as effective as topical ciprofloxacin, with a superior advantage of having no in vitro drug resistance and the added benefit of reduced cost of treatment.[2]

Many women find after taking antibiotics, they get vaginal yeast infections (because their normal bacterial balance has been lost). Antibiotics bring on fungal and yeast infections thus will eventually be seen as one additional cause of cancer since more and more oncologists are seeing yeast and fungal infections as an integral part of cancer and its cause. With upwards of 40 percent of all cancers thought to be involved with and caused by infections[3] the subject of antibiotics and the need for something safer, more effective and life serving is imperative.

Every day, new strains of bacteria, fungi, and other pathogenic microorganisms are becoming resistant to the antibiotics that once dispatched them with extreme prejudice

Though it kills 90 percent of bacteria on the skin within 90 seconds its use as an antibiotic has been ignored. Iodine exhibits activity against bacteria, molds, yeasts, protozoa, and many viruses; indeed, of all antiseptic preparations suitable for direct use on humans and animals and upon tissues, only iodine is capable of killing all classes of pathogens: grampositive and gram-negative bacteria, mycobacteria, fungi, yeasts, viruses and protozoa.

Most bacteria are killed within 15 to 30 seconds of contact.

lodine is by far the best antibiotic, antiviral and antiseptic of all time. Dr.David Derry

Dr. Derry says that iodine is effective "for standard pathogens such as Staphylococcus, but also iodine has the broadest range of action, fewest side effects and no development of bacterial resistance." There is a world of difference between using an antibiotic – anti-life



substance – and a antibiotic, antiviral and antifungal substance like iodine, which is life serving because it is a basic and most necessary nutritional substance.

lodine kills single celled organisms by combining with the amino acids tyrosine or histidine when they are exposed to the extra-cellular environment. All single cells showing tyrosine on their outer cell membranes are killed instantly by a simple chemical reaction with iodine that denatures proteins. Nature and evolution have given us an important mechanism to control pathogenic life forms and we should use it and trust it to protect us in ways that antibiotics can't.

[1] Ray WA, et al. (2004). Oral erythromycin and the risk of sudden death from cardiac causes. New England Journal of Medicine, 351(11): 1080–1096. A recent large study indicates that people who take erythromycin along with certain common medications may increase their risk of sudden cardiac death. [2] Evaluation of topical povidone-iodine in chronic suppurative otitis media; Java C et al; Arch Otolaryngol Head Neck Surg. 2003 Oct;129(10):1098-100; Entrez Pubmed [3] A major U.S. scientist says cancer – always believed to be caused by genetic cell mutations — can in reality be caused by infections from viruses, bacteria, yeasts, molds and fungus parasites. "I believe that, conservatively, 15 to 20 percent of all cancer is caused by infections; however, the number could be larger — maybe double," said Dr. Andrew Dannenberg, director of the Cancer Center at New York-Presbyterian Hospital/Weill Cornell Medical Center." Dr. Dannenberg made the remarks in a speech in December 2007 at the annual international conference of the American Association for Cancer Research.

lodine, The Rest of the Story

By David Brownstein, MD

In a number of past newsletters, three articles have extolled the value of iodine supplementation. A review of the older research as well as newer research has revealed that iodine deficiency is widespread and may be responsible for many underlying conditions including cancers of the breast and ovary, thyroid disorders, chronic fatigue, and fibromyalgia.

Appropriate testing for iodine deficiency was reviewed. The most accurate test to measure iodine levels is the iodine loading test. This was covered in the November 2005 Vitamin Research News. After taking 50 mg of an iodine/iodide combination, 24 hours of urine is collected. The amount of iodine excreted is measured. When there is iodine deficiency present, little iodine will be excreted during the testing. When there is sufficient body iodine levels present, larger amounts of iodine will be excreted.

I have been involved in the iodine project for approximately four years. During this time, I have tested iodine levels (with my partners) in over 4,000 patients. My results have been consistent: over 95 percent of patients have tested low for iodine.



The iodine loading test has proved useful to gauge the body iodine levels. The first question to come to mind if one tests low for iodine is, "Shouldn't I just take iodine?"

The best results with iodine, as with all nutritional supplements, can be achieved as part of a comprehensive holistic program. As I describe in my book, Iodine: Why You Need It, Why You Can't Live Without It 2nd Edition, adding magnesium and vitamin C will enhance the effects of iodine. This is particularly true for individuals experiencing a number of factors related to iodine. This article will cover four major factors sometimes associated with iodine supplementation and how vitamin C and magnesium can support individuals with these concerns:

- 1. Allergy
- 2. Autoimmune thyroid disorders
- 3. Detoxification Reactions
- 4. lodism

lodine allergy

In my experience, an allergy to inorganic, non-radioactive iodine is very rare. An allergy to radioactive iodine dye, commonly used in many medical procedures, does not guarantee an allergy to inorganic iodine/iodide such as lodoral®. If an allergy is shown to iodine, do not continue to take it until you seek medical care.

Autoimmune Thyroid Disorders

Some physicians feel that iodine supplementation causes autoimmune thyroid disorders. They also claim that those with autoimmune thyroid disorders should not take iodine as it will exacerbate their condition. Before conventional medicine began using radioactive iodine to treat autoimmune thyroid disorders, large doses of iodine was the treatment of choice in treating autoimmune thyroid disorders. There are numerous reports in the literature, some dating back well over 100 years, showing the benefits of using iodine in excess of the RDA to treat autoimmune thyroid illnesses.1-4 If iodine was the cause of autoimmune thyroid illnesses, these illnesses should have been decreasing over the last 30 years. The opposite has occurred. In the United States, iodine levels have fallen approximately 50 percent over the last 30 years while, at the same time, autoimmune thyroid disorders have been rapidly increasing.

5 My clinical experience has shown that in an iodine deficient state, higher doses of iodine, as part of a holistic treatment program, are an effective and safe way to treat autoimmune thyroid illness without appreciable side effects.

Detoxification Reactions

lodine can cause a detoxification reaction in the body by facilitating the body's release of the toxic halides fluoride and bromide. If the body's detoxification pathways are overloaded when the toxic halides are being released, a detoxification reaction can be triggered. A



detoxification reaction can take the form of fatigue, muscle aches, fever, diarrhea, and brain fog, skin rashes, etc.

Though a detoxification reaction to iodine usage is rare, it has happened. A detoxification reaction can be minimized with using nutritional support (vitamins and minerals), balancing the hormonal system, getting the body's pH balanced, eating healthy foods, and other holistic treatments. This will be discussed more at the end of this article.

lodism

lodism occurs when the dose of iodine is too high and results in a metallic taste in the mouth, increased salivation, sneezing, headache, and acne. Also, sinus headache, especially headache in the frontal area, and a sense of fever may be present. Iodism occurs in a small minority of patients and is easily rectified by adjusting the dosage of iodine used.

Synergistic Supplements

As with using any nutritional supplement, a comprehensive holistic treatment plan provides the best results. Magnesium is an important part of the iodine treatment plan. Magnesium deficiency is very common. Magnesium is nature's relaxing agent. Magnesium levels (via red blood cell magnesium levels) should be assessed and supplementation instituted. Magnesium supplementation will likely ensure optimal results with iodine. Vitamin C is also an integral nutrient in the iodine treatment plan. I reported a case study showing how the use of Vitamin C along with iodine helped to improve and possibly repair the transport mechanism for iodine in a patient with Graves' disease. As with magnesium, it is best to use Vitamin C before beginning iodine supplementation. My experience has also shown that proper mineral support also aids iodine supplementation. Testing for mineral deficiencies and correcting these deficiencies before instituting iodine supplementation leads to the best results. I frequently have my patients measure their pH levels. If an acidic condition is present, correcting the pH imbalance before beginning iodine therapy is the correct way to go. How do you correct a pH imbalance? Eating whole foods, eliminating refined foods, beginning mineral supplementation including magnesium can all help the situation. Iodine itself is also an alkalinizing agent for the body.

Summary

If one is found to be iodine deficient, it is best to correct other nutrient imbalances before instituting iodine supplementation. Proper dosing of magnesium, Vitamin C and minerals will maximize the response to iodine. Before beginning any nutritional program, the best results can be achieved when working with a health care practitioner skilled in the use of natural agents.

References: 1. Trousseau, A. Lectures on clinical medicine. Vol.1. Lecture XIX, Exophthalmic goiter of Graves' disease, New Sydenham Society, London. 1868. 2. Thompson W. Prolonged treatment of exophthalmic goiter by iodine alone. Arch Int Med.



1930; 45:481-502. 3. Plummer H. Results of administering iodine to patients having exophthalmic goiter. JAMA. 1923; 80:1955. 4. Thompson W. The range of effective iodine dosage in exophthalmic goiter. Arch Int Med. 1930; 45:261-281. 5. Hollowell JE, et al. Iodine nutrition in the United States. Trends and public health implications: Iodine excretion data from National Health and Nutrition Examination Surveys I and III (1971-74 and 1988-94). J Clin Endocrinol Metab. 1998; 83:3401-3408. 6. Abraham GE, Brownstein D. Evidence that the administration of Vitamin C improves a defective cellular transport mechanism for iodine: A case report. The Original Internist. 2005; 12(3):125-130.