

Iodine and Health

"In a recent study by the Institute for Antiviral Research at Utah State University, it was demonstrated that the COVID-19 virus can be completely inactivated with a 30-second exposure to a 100 ppm molecular iodine (I₂) mouthrinse." ¹ [ppm = parts per million]

Another article states that after the 1918 Influenza Pandemic, governments financed over 25 years of intensive research, with the conclusion that: "Iodine was the most effective agent for killing viruses, especially influenza viruses". ²

After discovering these articles, and considering my own, ten plus years' experience supplementing with a few drops per day of Lugol's solution ³, I came to the conclusion that **I no longer need to be overly concerned about contracting the COVID-19 virus** (and for that matter, most likely any of its mutations). Though, I will continue to practice common sense measures, like washing hands more frequently, social distancing and obtaining ample rest.

It becomes apparent that if this information is broadly disseminated, and carefully administered, it has the potential of providing a tremendous health benefit to humanity -- defending not only against viruses, but also a number of other illnesses! ⁴

By focusing on Iodine as being a key nutrient in maintaining health, it is not intended to minimize the importance of other necessary nutrients. Nor, is it necessarily intended to detract from the substances used by the medical establishment to treat patients who already have severe cases of the COVID-19 virus. Instead, the reason is that our need for Iodine has been understated in past decades, and confusion exists pertaining to its safety.

The goal then, for writing this article is to:

- Call the above-mentioned articles to your attention;
- Instruct how to make a 100-ppm Iodine mouth rinse using Lugol's solution;
- Make a few comments based on my personal experience;
- Point you to what other, holistic minded doctors have to say on this subject;
- Encourage others to educate themselves on this subject, thereby helping them to make better informed decisions.

Making Your Own Iodine Mouth Rinse: To derive an immediate benefit from the two sited articles above, by Trettenero and Derry, without taking Iodine internally, instructions are first given on how to simply and economically make your own 100-ppm molecular Iodine (I₂) mouth rinse using Lugol's solution and distilled water. It results in a relatively dilute concentration of Iodine. However, I do need to issue a disclaimer on its use. Although, I have carefully gone through the calculations, have had two other well qualified individuals

¹ Trettenero, D. Scott, DDS, "Molecular iodine as a new frontline defense against COVID-19 in the dental office", Nov., 2020.

² David Derry, MD, PhD, "Iodine: the Forgotten Weapon Against Influenza Viruses", September, 2009.

³ Lugol's solution is composed of distilled water, potassium iodide, and iodine. It can be taken internally.

⁴ Brownstein, David, MD., "Iodine - Why You Need It, Why You Can't Live Without It", 5th ed., Table 1, page 26.

review them, and have included the calculations at the end of this article for your examination, I have no control over how accurately your Iodine mouth rinse will be made. Consequently, if you decide to use the following information, you agree to accept all responsibility associated with its use.

Also be aware that either 2%, or 5%, Lugol's solution, straight from the dropper bottle, will temporarily stain teeth (or, their plaque coating). Though, at a 100-ppm concentration, staining is apparently not a major problem (For comparison, 2% Lugol's solution has an approximate 20,000-ppm concentration of molecular Iodine). However, if you are someone who strives to maintain gleaming white teeth, you may be willing to pay the additional cost for a commercial Iodine mouth rinse that has likely been formulated to reduce staining. Though, due to its additional ingredients, the directions for its use probably will indicate that it should not be swallowed.

To make a mouth rinse using 2% Lugol's solution: Place three vertical drops of 2% Lugol's solution into a medicine cup filled with 30 ml (milliliters) of distilled water, and it will make a mouth rinse with a concentration very near to 100-ppm of free Iodine (This does not include the Iodide content). As a note of clarification, this means three individual drops with the dropper positioned vertically, not the entire contents of three full droppers.

To make a mouth rinse using 5% Lugol's solution: Place one vertical drop of 5% Lugol's solution into 25 ml of distilled water, and it will make a mouth rinse with a concentration very near to 100-ppm of free Iodine (Some medicine cups also have a 25 ml graduation mark.).

Using Iodine Internally: An old adage is that: 'Food is your best medicine'. Though, most people know that, generally speaking, our food no longer has the mineral content it had a century or more ago. If you like to garden and have the where-withal to do so, there is a trend toward raising 'nutritionally dense' foods, by first testing your soil, then supplementing it with the needed natural minerals. If you rely on commercially grown organic produce, it still may not have an adequate amount of the necessary trace minerals. Consequently, unless you have your produce analyzed (which would be cost prohibitive), you will not have a quantitative knowledge of its trace mineral content.

Sea food is typically a good source of Iodine. However, I've yet to see its Iodine content listed on a Nutrition Facts label. There are also several online food nutrition data bases that have a wealth of nutritional information. However, those few that I've checked curiously leave out the Iodine content?

Sea Kelp is also a good source. The problem is that you would need to take a large amount of it to obtain the equivalent amount of Iodine (13 mg; i.e., milligrams)⁵ contained in two drops of 5% Lugol's solution. For example, if your kelp capsules contain 150 mcg (micrograms) of Iodine, which is equivalent to 0.15 mg, you would need to take an impractical: $13 \text{ mg} / 0.15 \text{ mg} \approx 86$ **capsules/day!** Similar comments can be made about relying on Iodized salt, and most vitamins, as your main Iodine source.

Due to these considerations, supplementing with a known amount of Iodine would assure that you are providing your body with what it needs. Note that not all Iodine products can be taken internally, as many contain additional ingredients that may be toxic. A table providing an overview of various forms of Iodine/Iodide used in clinical medicine, along with their toxicity levels, is found in Dr. Guy E. Abraham's article entitled, "Iodine: The Universal Nutrient". See the following link. From this table, observe that Lugol's Solution is classified as Inorganic/Non-radioactive, and is extremely safe.

https://www.curezone.org/upload/PDF/Assa_Iodine/Anaiodine6.pdf

My own experience supplementing with Lugol's solution: Along about 2007, Dr. Stanley Monteith (1929 - 2014), a retired orthopedic surgeon and host of RadiLiberty.com, began interviewing several knowledgeable individuals on the subject of Iodine. Those I recall were: Donald W. Miller, Jr., MD, retired heart surgeon; Russell L. Blaylock, MD, retired neurosurgeon; Jorge Flechas, MD, family practitioner & medical researcher; and Sherri J. Tenpenny, DO, an osteopathic physician. Listening to these interviews convinced me to begin supplementing with a few drops of Lugol's solution per day.

I began by taking only one drop of 2% Lugol's solution, two or three times per week, and carefully monitored its effect. Over time, I very gradually increased the dosage, to the extent that it took from nine months to a year before I felt completely comfortable regularly taking four drops / day.

Dr. Brownstein has stated that "an allergy to inorganic iodine/iodide is a rare occurrence."⁶ Since Iodine is needed by the human body, a reaction to it would most likely be due to some other reason. Two come to mind: 1) Its ability to purge toxins already stored in your body, or 2) The Iodine product is blended with other ingredients, forming an un-natural molecular compound which your body rejects.

Realizing that Iodine has the ability to purge toxins, when a minor symptom (such as a small rash, or diarrhea) was experienced, instead of completely discontinuing its use, I would only do so temporarily until my body normalized. Then, I would resume supplementing at a lower rate, and carefully increase the amount over time, as before. It may be that the microbes in my digestive system needed time to acclimate to it. Dr. Sherri Tenpenny has stated that: 'Iodine is very powerful, and it needs to be respected.'

⁵ "To protect themselves, people wishing to boost their defense against infections should supplement their diets with iodine in the form of Lugol's. Most people will probably be protected by an amount of Lugol's that provides the average amount of iodine ingested by Japanese populations for centuries. This amount is about 12 mg daily. Two drops of [5%] Lugol's daily in the liquid of their choice will provide 13 mg." David Derry M.D.

⁶ From the above referenced table by Dr. Abraham, we know that this includes Lugol's solution.

With time, I discovered that using 5% Lugol's solution was more economical, though in order to obtain it (at a discount) I had to subscribe for it to be automatically sent every 4 months. According to jcrow.com, taking 2 drops/day of 5% Lugol's solution provides about 12.5 mg of Iodine and Iodide. Listen to what Dr. Sherri Tenpenny has to say about how much Iodine is needed, by searching for: "How Much Iodine Do You Need?", Tenpenny; on youtube.com.

Early on, supplementing with Lugol's solution, I did not notice any dramatic improvement in overall health. Perhaps this may have been due to the fact that I was already in a fairly good state of health. I did notice a lessening of 'brain fog', and a better overall sense of well-being, but these changes were more subtle.

At some point I learned that, on those few occasions when I felt the onset of a throat infection⁷, taking an additional drop, or two, directly on the back of my tongue⁸ very effectively stopped it! On one occasion, doing this also dramatically eliminated a heavy mucous build up in my nasal passage overnight! Since this experience I've done the same thing when just beginning to experience a mucus build up, with similar good results. Now, if either of these symptoms reoccur later in the same day, I repeat this procedure - more than once⁹, if necessary. Though, I also drink plenty of pure water, and try to obtain ample rest.

This has been my experience, and I hope that eventually everyone will be made aware of Iodine's dramatic beneficial properties! I'm sharing this for information purposes only. Not being a medical doctor, I cannot make any such recommendations to others -- that would need to be their decision. Though, hopefully my experience will motivate others to educate themselves on this subject.

Dr. Brownstein advises to begin supplementing with Iodine under the supervision of a an iodine-knowledgeable health care provider (This would be especially so if you no longer are in good health, have been taking pharmaceuticals, or have thyroid problems.). His book: "Iodine, Why You Need It, Why You Can't Live Without It", 5th edition, would be a good place to start.

An Unanswered Question: Dr. Derry includes the following statement in his article, under the subheading, **Lugol's Iodine Solution:** 'Free iodine is believed to react with the amino acids tyrosine and/or histidine at low concentrations. The reaction denatures proteins and causes the death of cells.'¹⁰ Might this also include the spike proteins, which I've heard may accumulate at various points in the circulatory system of individuals who have received the COVID-19 vaccinations, making them more susceptible to blood clots?

⁷ Which I believe is indicated by a 'tickle', whereas swelling indicates the body's effort to remove an ingested toxin.

⁸ I learned to avoid having it come in direct contact with the more delicate tonsils.

⁹ An upper limit may be 50 mg/day of elemental Iodine. Dr. Guy E. Abraham, "Iodine: The Universal Nutrient".

¹⁰ David Derry, MD, PhD, "Iodine: the Forgotten Weapon Against Influenza Viruses", September, 2009.

Notable Quotes:

"Research has pointed us in the right direction with molecular iodine. We just need to implement it and spread the word that there is a safe and inexpensive pathway to prevention of COVID-19." -- Scott Trettenero

"Supplementation with high doses of iodine may be the safest, easiest, most efficient, and also an inexpensive way to push through a health crisis affecting the nation" - Guy Abraham, an endocrinologist and researcher dedicated to exploring the health benefits of iodine.

"When I was a young student, iodine and potassium iodide were a universal medicine. Nobody knew how they worked, but we knew it worked exceptionally well." -- Dr Albert Szent Gyorgyi, The Nobel laureate who discovered vitamin C.

"Iodine is the best antibiotic, anti-virus and antiseptic agent of all time." -- David Derry, MD.

"Once in a while you will stumble upon the truth but most of us manage to pick ourselves up and hurry along as if nothing had happened." -- Winston Churchill.

"And ye shall know the truth, and the truth shall make you free." -- Jesus Christ. John 8:32

An important point to realize is that although Iodine is an essential trace mineral needed to allow our immune system to function as designed, only the stripes that our Lord and Savior willingly suffered for us, can heal us of the consequences of sin.

1 Peter 2:24 "who his own self bare our sins in his own body on the tree, that we, being dead to sins, should live unto righteousness: by whose stripes ye were healed."

Other Reliable Experts: At this point I would like to provide an Internet link to the published research of noted experts on Iodine supplementation: Guy E. Abraham, M.D.; David Brownstein, M.D.; and others. Otherwise, you'll discover that the information, in general, on this subject is not all consistent, and consequently confusing.

<https://www.optimox.com/iodine-research>.

David Brownstein, MD.: <https://www.drbrownstein.com/>

Jorge Flechas, MD.: <https://www.helpmythyroid.com/publications/>

Stephanie Buist: Iodine Conference Lecture - on youtube.com

The following website is also interesting:

<https://alternativa-za-vas.com/en/index.php/clanak/article/lugols-solution>

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100-ppm Mouth Rinse Calculations: The goal here is to calculate how many drops of Lugol's solution to add to a small amount of distilled water to create a 100 parts per million (ppm) iodine mouth rinse.

Since the articles by Derry & Trettenero state that it is only the free, or molecular, iodine that inactivates viruses, the Iodide in the Lugol's solution is not considered in determining the desired concentration. The general equation used for this purpose is:

$$\text{ppm of Iodine} = \frac{\text{grams of Iodine}}{\text{grams of solution}} \times 10^6$$

The following input information should be sufficiently accurate for creating a mouth rinse.¹¹

- A vertical "metric" drop is approximately equal to 0.05 ml.
- Iodine, per vertical drop of 2% Lugol's Solution is approximately 1.0 mg (0.001 g).
- Iodine, per vertical drop of 5% Lugol's Solution is approximately 2.5 mg (0.0025 g).
- Approximate density of 2% Lugol's solution: 1.05 g/ml.
- Approximate density of 5% Lugol's solution: 1.12 g/ml.

A 30 ml quantity of distilled water will be used in the initial calculations, since graduated medicine cups of this size are readily available, and it is an adequate amount for a mouth rinse.

Step 1: Determine the number of grams in 30 ml of distilled water. Although water density varies with temperature, you'll probably consider its variation over the temperature range encountered while making a mouth rinse to be insignificant. For this example, 0.997 g/mL at 25 °C (77 °F) will be used.

$$30 \text{ ml} \times \frac{0.997 \text{ g}}{\text{ml}} = 29.91 \text{ g}$$

Step 2: Determine the number of grams in 0.05 ml (i.e., one vertical drop) of 2% Lugol's solution.

$$2\% \text{ Lugol's solution: } 0.05 \text{ ml} \times \frac{1.05 \text{ g}}{\text{ml}} = 0.0525 \text{ g}$$

Step 3: Determine the resulting ppm of free Iodine in solution, obtained by placing one vertical drop of 2% Lugol's solution into 30 ml of distilled water.

$$\text{Using one drop of 2\% Lugol's solution: } \frac{0.001 \text{ g}}{(29.91 + 0.0525) \text{ g}} \times 10^6 = 33.375$$

Note that 0.001 g of Iodine (obtained from jcrowds.com) is used in this calculation, rather than 2% of 0.0525 g.

Using three drops of 2% Lugol's will get us close to what we want:

$$\frac{3 \times 0.001 \text{ g}}{(29.91 + 3 \times 0.0525) \text{ g}} \times 10^6 = 99.8$$

If you are using 5% Lugol's solution:

Step 2a: Determine the number of grams in 0.05 ml (i.e. one vertical drop) of 5% Lugol's solution.

$$5\% \text{ Lugol's solution: } 0.05 \text{ ml} \times \frac{1.12 \text{ g}}{\text{ml}} = 0.056 \text{ g}$$

¹¹ <https://jcrowds.com/calculating.html>

Step 3a: Determine the resulting ppm of free Iodine in solution, obtained by placing one vertical drop of 5% Lugol's solution into 30 ml of distilled water.

$$\text{Using one drop of 5\% Lugol's solution: } \frac{0.0025 \text{ g}}{(29.91+0.056) \text{ g}} \times 10^6 = 83.4$$

It appears that the most direct way to increase the parts of Iodine from 83.4 to 100 is to reduce the initial amount of water used. Let's rearrange this equation to solve for the grams of water 'w', needed to obtain a 100-ppm solution, while still using n = 1 drop of 5% Lugol's solution:

$$\frac{0.0025 n}{(w + 0.056 n)} \times 10^6 = 100$$

$$0.0025 n \times 10^4 = w + 0.056 n$$

$$w = 0.0025 n \times 10^4 - 0.056 n$$

$$w = n [0.0025 (10^4) - 0.056]$$

$$\text{For } n = 1: w = 24.94 \text{ g} \rightarrow \approx 25 \text{ g}$$

Now repeat Step 1 using 25 ml of distilled water:

Step 1a: Determine mass of 25 ml of distilled water at 25 °C (77 °F).

$$25 \text{ ml} \times \frac{0.997 \text{ g}}{\text{ml}} = 24.925 \text{ g}$$

Step 3a: Determine the resulting ppm of free Iodine in solution, obtained by placing one vertical drop of 5% Lugol's solution into 25 ml of distilled water.

$$\text{Using one drop of 5\% Lugol's solution: } \frac{0.0025 \text{ g}}{(24.925 + 0.056) \text{ g}} \times 10^6 \approx 100$$

In the UK, Lugol's solution is apparently available in 3%, 7% and 15%. If you live in an area where this is the case, I would recommend having a chemist go over the calculations.

I would like to acknowledge appreciation for a couple of well qualified individuals (to remain anonymous) who have reviewed the major parts of this article, making comments & suggestions.

To preserve its intended meaning, no part of this article should be taken out of context.