## Iodine and Health

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". <sup>1</sup>

Another study by the Institute for Antiviral Research at Utah State University demonstrated that the COVID-19 virus can be completely inactivated with a 30-second exposure to a 100-ppm molecular iodine ( $I_2$ ) mouthrinse. <sup>2</sup> (ppm = parts per million)

After discovering these articles, and considering my own ten plus years' experience supplementing with a few drops per day of Lugol's solution<sup>3</sup>, I came to the conclusion that I no longer need to be overly concerned about contracting the COVID-19 virus, and most likely any of its mutations<sup>4,1</sup> (Though, I continue to practice common sense deterrence measures). And, I feel compelled to share what I've learned with others.

By focusing on Iodine in this article, it is not intended to minimize the importance of other necessary nutrients in maintaining health. Nor, is it necessarily intended to detract from the substances used by the medical establishment to treat individuals who already have severe symptoms of the COVID-19 virus. Instead, the reason is that the human body's need for Iodine has been understated in past decades and confusion exists pertaining to its safety. <sup>1</sup>

The purpose 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;
- Comment on taking Iodine internally;
- Comment on my personal experience; and,
- Point you to what some holistic doctors have to say on this subject.

<u>Making Your Own Iodine Mouth Rinse</u>: To derive an immediate benefit from the two sited articles above, without taking Iodine internally, instructions are first given on how to simply and economically make your own 100-ppm molecular Iodine ( $I_2$ ) mouth rinse using Lugol's solution and distilled water. It results in a relatively dilute Iodide/Iodine solution. However, I need to issue a disclaimer on its use. Although, I have carefully gone through the calculations, have had two

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<sup>&</sup>lt;sup>1</sup> David Derry, MD, PhD, "Iodine: the Forgotten Weapon Against Influenza Viruses", September, 2009.

<sup>&</sup>lt;sup>2</sup> Trettenero, D. Scott, DDS, "Molecular iodine as a new frontline defense against COVID-19 in the dental office", Nov., 2020.

<sup>&</sup>lt;sup>3</sup> Lugol's solution is composed of distilled water, potassium iodide, and iodine. It can be taken internally.

<sup>&</sup>lt;sup>4</sup> "... No organism develops resistance to iodine.", Reddish, G.F., "Antiseptics, Disinfectants, Fungicides, and Chemical and Physical Sterilization", Philadelphia, Lea & Febiger, 1957.

well qualified individuals 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 may be formulated to reduce staining. Though, due to its additional ingredients, the directions for its use probably will indicate that it should not be swallowed. Other possible means of application to avoid contact with teeth is to use the 100-ppm solution as a nasal spray. Or ask an iodine-knowledgeable healthcare practitioner about the possibility of using a weak Iodine solution in a nebulizer.

<u>Using 2% Lugol's Solution</u>: 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. As a note of clarification, this means three individual drops with the dropper positioned vertically, not the entire contents of three full droppers.

<u>Using 5% Lugol's Solution</u>: 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.).

<u>Using Iodine Internally</u>: An old adage is that: 'Food is your best medicine'. Though generally speaking, most people know that our food no longer has the mineral content it had a century or more ago. Even if you rely on commercially grown organic produce, it still may not have an adequate amount of the necessary trace minerals (including Iodine). 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. Either way, unless you have your produce analyzed (which would be cost prohibitive), you will not have a quantitative knowledge of its trace mineral content.

Fish is typically a good source of Iodine, however the amount is not shown on 'Nutrition Fact' labels. 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 has also been a good source. However, one problem is that you would need to consume a large amount of it to obtain the equivalent amount of Iodine contained in two drops of 5% Lugol's

solution, which is 13 mg; i.e., milligrams<sup>5</sup>. For example, if your kelp capsules contain 150 mcg (micrograms) of Iodine, which is equivalent to 0.15 mg, you would need to take: 13 mg / 0.15 mg  $\approx$  86 capsules/day! (Similar comments can be made about relying on Iodized salt and most vitamins as your main Iodine source). Another problem is seaweed's potential toxicity, which can now include arsenic, pesticides, radioactive waste and heavy metals. Some practioners are of the view to never prescribe seaweed in any form. <sup>6</sup>

Due to these considerations, supplementing with a known amount of Iodine would assure that you are providing your body with what it needs. Any excess amount is passed through the body.<sup>7</sup> Listen to what Dr. Sherri Tenpenny has to say about how much Iodine is needed by clicking on the following link:

https://www.youtube.com/watch?v=ef43A8JOM8w&ab\_channel=iHealthTube.com

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 experience supplementing with Lugol's solution: Along about 2007, Dr. Stanley Monteith (1929 - 2014), a retired orthopedic surgeon and host of RadioLiberty.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 Lugol's solution.

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, the dosage was very gradually increased, to the extent that it took from nine months to a year before I felt completely comfortable regularly taking the recommended dose of four drops / day. I may have been overly cautious. If you already have a health issue that possibly could be alleviated with Iodine, it may be advantageous to begin taking the recommended dose early on.

Since Iodine is needed by the human body, a reaction to it most likely would be due to some other reason. Dr. Brownstein has stated that "an allergy to inorganic iodine/iodide is a rare occurrence", and that if side effects occur, a selenium deficiency may be a possible cause.<sup>8</sup> Two other reasons also come to mind: 1) Its

<sup>&</sup>lt;sup>5</sup> "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.

<sup>&</sup>lt;sup>6</sup> http://www.breastcancerchoices.org/ipractitioners.html

<sup>&</sup>lt;sup>7</sup> Brownstein, David, MD., "Iodine - Why You Need It, Why You Can't Live Without It", 5th ed., pages 260 & 291.

<sup>&</sup>lt;sup>8</sup> Brownstein, 5th ed., pages 252 & 146.

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 until the recommended dosage was achieved. It may be that the microbes in my digestive system needed time to acclimate. Dr. Sherri Tenpenny has stated that: 'Iodine is very powerful, and it needs to be respected.'

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 jcrows.com, taking 2 drops/day of 5% Lugol's solution provides about 12.5 mg of Iodine and Iodide.

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.

However, at some point I learned that on those few occasions when I felt the onset of a throat infection  $^9$ , taking an additional drop, or two, directly on the back of my tongue  $^{10}$  very effectively stopped it within a short time! 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 re-occur later in the same day, I repeat this procedure – more than once  $^{11}$ , if necessary. Though, I also drink plenty of pure water, and try to obtain ample rest.

Observe that daily supplementing with Lugol's solution has not completely protected me from contracting a viral infection in the throat or nasal passage. However, I've found that when needed, an additional direct oral dose, as described above, is very effective. This is predicated on an individual striving to maintain a healthy diet and lifestyle. For anyone not meeting these qualifications, the method described above may be less effective.

This has been my experience, and I hope that eventually everyone will be made aware of Iodine's dramatic beneficial properties! 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!  $^{12}$ 

<u>I'm sharing this for information purposes only.</u> Not being a medical doctor, <u>I cannot make any specific recommendation to others</u> -- that would need to be their decision. Though, hopefully my experience will motivate others to educate themselves on this subject.

<sup>&</sup>lt;sup>9</sup> Which I believe is indicated by a 'tickle', whereas a swelling is your thyroid's effort to remove a toxin.

<sup>&</sup>lt;sup>10</sup> Avoid placing it down your throat (causing a gag reflex) or having it come in contact with delicate tonsils.

<sup>&</sup>lt;sup>11</sup> An upper limit may be 50 mg/day of elemental Iodine. Dr. Guy E. Abraham, "Iodine: The Universal Nutrient".

<sup>&</sup>lt;sup>12</sup> Brownstein, 5th ed., Table 1, page 26.

Dr. Brownstein advises to begin supplementing with Iodine under the supervision of 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.

Lugol's solution is fairly economical, though additional savings may be obtained by purchasing its high purity ingredients and making it yourself. The ingredients are: Distilled water, potassium Iodide crystals, and Iodine (prilled or crystals). One source to obtain these ingredients is: <a href="https://ingredientdepot.com/">https://ingredientdepot.com/</a> Instructions on how to make it can be found in the following youtube.com video:

https://www.youtube.com/watch?v=IDlfsygVgUc&ab\_channel=Artisan-man

## 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 E. 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

<u>Other Consistent Information Sources</u>: At this point I would like to provide Internet links to 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 on this subject is generally 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

To avoid having to manually type the links in this article to obtain additional information, a pdf file of this article may be downloaded by going to cbcg.org and searching for its title.



<u>Mouth Rinse Calculations</u>: 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. The general equation used for this purpose is:

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

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 following input information should be sufficiently accurate for creating a mouth rinse. <sup>13</sup>

- 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.

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.

<u>Step 1</u>: 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 at which a mouth rinse would be used as insignificant. For this example, 0.997 g/mL at  $25 \, ^{\circ}\text{C}$  (77  $^{\circ}\text{F}$ ) will be used.

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

## If Using 2% Lugol's Solution

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

$$0.05 \text{ ml} \times \frac{1.05 \text{ g}}{\text{ml}} = 0.0525 \text{ g}$$

<u>Step 3</u>: 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.

Using one drop of 2% Lugol's solution:

$$\frac{0.001\,g}{(29.91+0.0525)\,g} \times 10^6 = 33.375$$

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

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

<sup>13</sup> https://jcrows.com/calculating.html

## If Using 5% Lugol's Solution:

<u>Step 2a</u>: Determine the number of grams in 0.05 ml (i.e. one vertical drop) of 5% Lugol's solution. The approximate density of 5% Lugol's solution:  $1.12 \text{ g/ml.}^{14}$ 

$$0.05 \text{ ml} \times \frac{1.12 \text{ g}}{\text{ml}} = 0.056 \text{ g}$$

<u>Step 3a</u>: 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.

$$\frac{0.0025 \text{ g}}{(29.91+0.056) \text{ g}} \times 10^6 = 83.4$$

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:

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

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

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

$$w = \text{n} [0.0025 (10^4) - 0.056]$$

$$w = 24.94 \text{ q} \rightarrow \approx 25 \text{ q}$$

For n = 1:

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).

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

**Repeat 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.

$$\frac{0.0025 \text{ g}}{(24.925 + 0.056) a} \times 10^{6} \approx 100$$

It appears that in the UK, Lugol's solution is available in 3%, 5%, 7% and 15%. If you live in an area where either the 2% or 5% is not available and have a desire to make your own mouth rinse, have a chemist go over these calculations using the concentration that is available to you.

An important point to realize is that although Iodine is an essential trace mineral needed for our immune system to function properly, there is a spiritual component to maintaining overall health & wellbeing, which is beyond the scope of this article. Example Biblical references: Isaiah 53:5, 1 Peter 2:24, and John 5:14.

To preserve its intended meaning, no part of this article should be taken out of context. If this article has been of value to you, give Jesus Christ, the creator of all things, and our Lord and Savior, the glory.

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<sup>&</sup>lt;sup>14</sup> Provided by Steve Corley, Ph.D., my 'go to' source for chemistry answers. I also deeply appreciate his willingness to review this article.