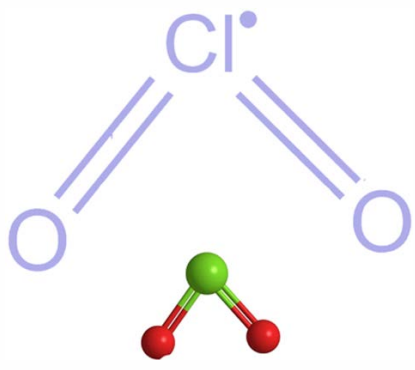
The Universal Antidote

The Science & Story of Chlorine Dioxide



Interactive Reference Guidebook

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The Universal Antidote Interactive Reference Guidebook

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Note: Thank you to the many contributors to both the documentary and the reference guide. Thanks to Charlotte, Daniel, Brian, Kerri, Bob, Mark, Steve, Maggie, and so many more. Thanks to my wife who has put up with me and my CD/MMS talk for 2+ years. Thank you to all of the people that were brave enough to share their stories.

Table of Contents

*This reference guide is interactive. You can click on links to open documents and literature references on the web. If you can't find a reference, or if you have a question, you can email me at the following email address: theuniversalantidote@protonmail.com

(click on any of the sections to be taken there directly)

Introduction

Section 1: The Universal Antidote Script with Citation References

Section 2: Full List of References from My Research

A. Safety Studies

B. Efficacy Studies

a. Antiviral Research
b. Antibacterial Research
c. Direct Human Research
d. Pesticide/Herbicide/Pollutant Cleanup Research
e. Antifungal Research
f. Antiparasitic Research
g. Mercury Neutralization Research
h. Miscellaneous Research
i. Tristel Company Research
j. Papers With Other CD Literature References

Section 3: Chlorine Dioxide Patents

Section 4: Negative Reports in the Scientific Literature

Section 5: Social Networks, Books, and more

Introduction

The first part of this interactive reference guide is designed to give you quick access to all of the information presented in the movie documentary, The Universal Antidote. It includes the script of the documentary and references provided throughout the script as it progresses. This will allow an investigator to quickly look up all of the references as the documentary progresses.

The second portion of this interactive reference guide provides the reader with links and citations to all of the research that I have uncovered during my two year investigation. These research article links and papers are by no means thorough, and as I continue my research, this work may be added to.

Section 1: The Universal Antidote Script with Citation References

Note: Script test is black and citation reference text is blue.

What if I told you that people have been needlessly suffering and dying from diseases like cancer, aids, Lyme disease and a virtually endless list of viral and bacterial infections?

What if I told you that an inexpensive and effective chemical remedy exists, and that remedy has been silenced, falsely discredited and hidden from the world?

What if I told you that there was undeniable evidence, as well as countless testimonies of its safe use and powerful effectiveness.

Would you be willing to learn the truth?

The news media calls it a poisonous bleach and the Food and Drug Administration says that it's a dangerous toxic chemical and harmful to humans.

Yet not that long ago, NASA researchers proclaimed it to be a universal antidote and more recently thousands of physicians in Central and South America have used it with 100% effectiveness against COVID-19.

The link below is the 1987 NASA article that labeled a patented chlorine dioxide product called Alcide, a universal antidote. The title of the article was "A Universal Antidote" (pg. 118-121)

https://spinoff.nasa.gov/back_issues_archives/1988.pdf (Pg. 118-121)

This earlier NASA article from 1983 was titled "A Multipurpose Compound"

https://spinoff.nasa.gov/back_issues_archives/1983.pdf (Pg. 86-87)

In 2015, I stumbled upon information about an alleged "miracle supplement" called mms or **M**iracle **M**ineral **S**olution.

I'm a critical care nurse, and have worked in the healthcare field for 25 years. I've seen a lot of snake oil salesmen in my time, and I'm always skeptical when I hear of any medicine that is called a miracle and it has been my strongly held belief that if something is too good to be true it usually is. I was promptly scared away from MMS after watching a documentary on YouTube called "The Church of Bleach."

https://abc7.com/church-of-bleach-genesis-ii-2-health-and-healing/1578279/

Complete chlorine dioxide propaganda playlist:

https://www.youtube.com/playlist?list=PLSyXKaVAWdrxjmmzEWiVgYoLHDtgOi3vK&feature=share

That documentary, along with several others, was designed to scare people away from this substance and make anyone who would consider using it seem to be a member of a cult group at best or end up with death by poisoning at worst.

It was not until 3 years later, in early 2018, that my eyes would be opened to the truth of what this miracle mineral supplement was all about. From this point forward I'll refer to MMS as chlorine dioxide its proper chemical name.

I would like to start by telling you how I was first introduced to MMS. A friend came to visit in early 2016. She told me about someone she knew who had spent over a decade in Africa doing missionary work and helping people with all kinds of health problems. She gave me his number and said I should give him a call and talk to him about his experiences.

I gave Dave the missionary a call. I've changed his name in order to protect his missionary work in Africa.

So I spent about 20 minutes on the phone with Dave. That was in 2016. I really didn't get much out of the conversation at the time because I didn't know much about the topics and alternative remedies that he was talking about.

He told me about his use of what he called MMS, its amazing effectiveness, and how he was helping people in some of the poorest regions of Africa.

About a year and a half later in 2018, I ran across a video titled Quantum Leap. That video was a documentary that included interviews with people who had been cured of both minor and serious diseases using MMS.

After spending 25 years in the health care field as a nurse, I was very skeptical and I found it incredibly difficult to believe that so many people had been cured by a single substance. However, as I watched, my mind raced back to the conversation with Dave the missionary and the pieces began to fall together.

I called my friend back and got Dave's phone number again. It just so happened that he was back in the US on leave from his missionary work in Africa, and I was able to contact him. Dave and I

again talked on the phone for about 30 minutes. The stories of cured diseases were very similar to the stories that were related in the Quantum Leap video.

---(link to full video documentary with Dave the missionary)---

That conversation set me on a two-year journey to discover the truth of chlorine dioxide for myself.

Over the next two years I set out to prove to myself once and for all if this substance was truly a miracle or truly the poison that the mainstream media was making it out to be.

I read hundreds of scientific papers, research articles, and patent applications. I listened to well over 100 personal video testimonies, and I watched every anti-chlorine dioxide video that I could get my hands on. I really wanted to know if there were legitimate and well founded arguments against the use of chlorine dioxide.

I took notes, screen captured comments, downloaded video testimonies, and joined forums so that I could personally communicate with those using chlorine dioxide.

In this video, I want to share my two year journey of discovery with you so that you can save yourself some time and effort. I'm not saying that you shouldn't do your own research, but I am saying that I have done a significant amount of unbiased research, and I was willing to go either way with regard to accepting the claims of chlorine dioxide.

I wasn't committed to proving the substance true, but as a healthcare provider, I have always been committed to finding things that help people get well and then educating people about those things.

As I jumped right into my search for the truth, I had questions that I needed answered. My questions about chlorine dioxide and their answers are summed up in this documentary which will be presented in 4 parts. In Part one we'll learn what chlorine dioxide is and take a brief walk through the history of its use in the United States.

Part 2 addresses the safety of chlorine dioxide for human use.

In Part 3 you'll find out just how effective chlorine dioxide is and explore its wide range of uses.

And Part 4 is comprised of personal testimonies from people who have experienced healing from the use of chlorine dioxide.

A full review of the data collected during this journey of discovery can be found in the PDF provided in the description of this video if you're watching the original on my YouTube channel

or on my brighteon.com back up channel. Both channels are titled "curious human productions". If you copy and re-upload this video, I would ask that you place a link to the PDF reference document in the description of your re-uploaded video.

Curious Human Productions YT Channel:

https://www.youtube.com/channel/UCvHthwYiK5greISPBs_cM7Q

Curious Human Productions Brighteon.com Channel:

https://www.brighteon.com/channels/curiousoutlier

Curious Human Productions Bit Chute Channel:

https://www.bitchute.com/channel/vrPbyKTAWm0N/

So what is chlorine dioxide and how is it used?

First let me say that chlorine dioxide has had a rich and well-spoken of history in the US and abroad long before the media and powers that be came against it.

So what made the change?

Let me see if I can connect the dots through a quick review of its history here in the United States.

Since its discovery in 1814 by Sir Humphrey Davy, the use of chlorine dioxide has slowly grown, and it is now used in a wide range of industries. Its use has significantly increased since the late 1970s.

https://www.scotmas.com/chlorine-dioxide/what-is-chlorine-dioxide.aspx

Chlorine dioxide is registered as a sterilizer and biocide and is used to sterilize medical facilities and laboratories including BSL-3 and BSL-4 labs which handle the world's most deadly pathogens.

https://www.clordisys.com/lifesciencesapp.php

Chlorine dioxide is a biocide. This means it kills all bacteria, viruses, and fungus on contact through a process of oxidization.

It has many applications from the food and beverage industry where it is used as an antimicrobial agent for washing foods, cleaning produce, and disinfecting liquids. It's used in the pharmaceutical and medical device industry for contamination control and sterility. Hospitals, schools, and daycares use it as a sterilizing disinfectant to prevent dangerous pathogens like MRSA, corona virus, and mold spores.

Food safety: https://www.clordisys.com/foodsafetyapp.php

Healthcare: https://www.clordisys.com/healthcareapp.php

Medical devices: https://www.clordisys.com/cannabisapp.php

Pharmaceutical: https://www.clordisys.com/pharmaceuticalapp.php

Chlorine dioxide is used for municipal water purification and has become the gold standard because it is safe for human consumption, non-carcinogenic and non-mutagenic.

Chlorine dioxide is a gas and must be produced at the time of use. The most common and simple method for producing chlorine dioxide gas is a process of mixing sodium chlorite (NaClO2) and an acid activator. When these two substances are mixed, chlorine dioxide gas forms.

The gas is a very simple and tiny molecule and contains one chlorine atom (Cl) and two oxygen atoms (O2).

It is extremely soluble in water and does not create chemical bonds. This means that the gas can be dissolved entirely in water. Because of this property it can be used to safely and effectively purify water while completely deactivating viruses, bacteria, fungi, and some types of small parasites. It even neutralizes many toxins, pesticides, herbicides, and pharmaceuticals that contaminate drinking water. As an added bonus, It can do all of that without producing any harmful organic compounds as occurs with nearly all other disinfectants.

https://www.scotmas.com/chlorine-dioxide/is-clo2-safe-for-the-environment.aspx

https://www.clordisys.com/safety.php

Industries that rely on chlorine dioxide for disinfectant properties include agriculture, health care, food, beverage, public water works, and air quality just to name a few.

Up until the 1970s, chlorine dioxide was primarily used on a small scale for water disinfection but failed to gain early and widespread use because of the inexpensive but more toxic chlorine bleach which had been used for drinking water disinfection since the 1920s.

Howard Alliger an inventor, scientist, and business man first discovered the beneficial effects of chlorine dioxide for not only human and animal health but for almost anything that involves killing bacteria, viruses, and fungi. He made his discovery, while searching for a non-corrosive sterilizer that could be used with a product that he had helped develop and sell called the sonicator.

This work led him to experiment with chlorine dioxide as a sterilizer with part of his system. He discovered a formulation for a simple method of generating chlorine dioxide using sodium chlorite and an acid activator. The method worked perfectly with his sonicator. He patented the chemical process and named it Alcide. He then discovered that the chemical worked just as well for sterilization without the ultrasonic device. He took his patented process and chemical formulation for producing chlorine dioxide and formed a company around it using the same name, Alcide Corporation.

https://www.encyclopedia.com/books/politics-and-business-magazines/misonix-inc

This article below is the article in which NASA labeled a patented chlorine dioxide product called Alcide, A Universal Antidote. You will find the article on pg. 118-121.

https://spinoff.nasa.gov/back_issues_archives/1988.pdf (Pg. 118-121)

This is an earlier NASA article that

https://spinoff.nasa.gov/back_issues_archives/1983.pdf (Pg. 86-87)

(This is a PDF file and may give you a warning when you open. It is safe to open the pdf file)

Alcide Corporation went on to produce multiple patents and products that utilized the antimicrobial and healing effects of chlorine dioxide. Alcide Corporation had patents for treating wound disinfection, donated human blood and blood component disinfection, an oral rinse for prevention and treatment of infection, formulations for anti-inflammatory diseases including psoriasis, fungal infections, eczema, dandruff, acne, genital herpes, and leg ulcers. Other products included topical applications for preventing and treating bacterial infections including udder mastitis, in mammals.

Also under development were systemic anti-inflammatory formulations and methods for reducing inflammation in tissues such as the bowel, muscle, bone, tendon and joints.

Methods also were developed and patented for preventing and treating microbial infections in the lower genital tract of mammals. These included treatment of vulvitis, vaginitis, cervicitis, and endometritis which involved an intra-vaginal and/or intra-uterine infusion.

Apart from the applications for human and animal use Alcide Corporation also received multiple patents that utilized chlorine dioxide for the treatment and disinfection of food and beverages, the disinfection of surfaces for Industrial, health care, agricultural, and more.

https://patents.google.com/patent/EP2525802A4/en?inventor=Howard+Alliger&oq=Howard+Alliger

Wound disinfection and repair

https://patents.google.com/patent/US5622725A/en

Composition and procedure for disinfecting blood and blood components

https://patents.google.com/patent/US5019402A/en

Anti-inflammatory formulations for inflammatory diseases

https://patents.google.com/patent/USRE37263E1/en

Disinfecting oral hygiene compositions and process for using the same

https://patents.google.com/patent/US5100652A/en

Method and composition for prevention and treatment of female lower genital tract microbial infections

https://patents.google.com/patent/US5667817A/en

Full List Patents:

https://patents.justia.com/assignee/alcide-corporation?page=2

Alcide Corporation went public in 1983, and for reasons unknown, Howard soon sold his share of the company and parted ways. When Howard left the company, he had to sign a no compete agreement with Alcide Corporation which prevented him from developing chlorine dioxide products.

---per interview with Valerie Alliger-Bogard and https://www.encyclopedia.com/books/politics-and-business-magazines/misonix-inc---

Remarkably, in 1994 at the age of 66, he started the company ARCO research and began his work with chlorine dioxide again after the no compete agreement had expired. In 2004 ARCO research became Frontier Pharmaceutical and has continued to expand and develop chlorine dioxide products for human use, and before his death at 92 years of age, Mr. Alliger even patented a method for treating cancer with chlorine dioxide injections.

Patent for treating cancer

https://www.facebook.com/permalink.php?story_fbid=10156003782787503&id=180035622502

https://frontierpharm.com/pages/history

Direct discussion with Valerie Alliger

Also, in 2004 the multibillion dollar company Ecolab acquired Alcide Corporation. The CEO of echo lab at the time stated "We believe the transaction of Alcide is attractively priced for Alcide shareholders, and will allow Alcide to accelerate growth for its products and improve opportunities for its employees."

https://investor.ecolab.com/news/news-details/2004/Ecolab-Closes-on-Purchase-of-Alcide/default.aspx

After Ecolab purchased Alcide, research and development for human applications of chlorine dioxide seems to have stopped, and Alcide products were rebranded with a strong focus on industrial and agricultural use.

Now we need to step back in time a bit to 1996. It was at this point where the course of chlorine dioxide took a very interesting turn with the coincidental discovery of a common yet eccentric gold miner by the name of Jim Humble.

In the summer of 1996, Jim Humble was hired to lead a mining expedition through the jungles of South America. During the expedition two of the men on his crew were bitten by mosquitoes and became very ill with what they thought was malaria. They had no anti-malarial medication and were two days away from any help. Jim had brought bottles of stabilized oxygen. Stabilized oxygen is a liquid solution of sodium chlorite that is used to purify water.

---verification of Jim Humbles gold mining background---

Gold Mining:

Other Books and Articles written by Jim Humble:

1. CLS manual: Non-cyanide leaching (1985)
   https://www.actionmining.com/product/cls-manual/

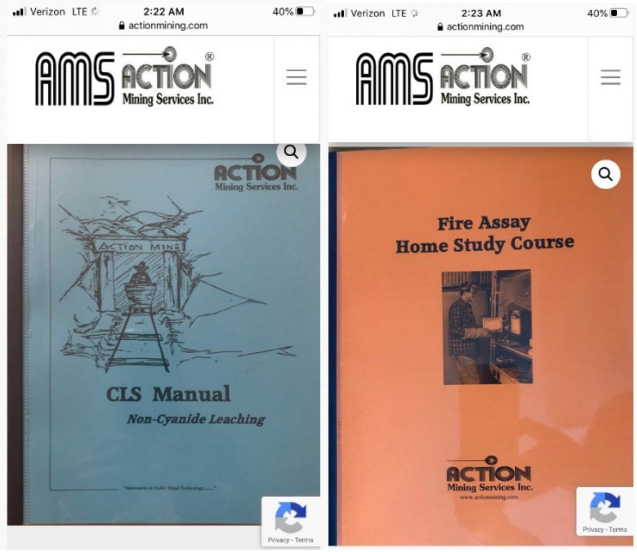
2. The truth in modern gold mining: (Gold mining opportunities for the investor) 1994

3. Popular Mining; March/April 1988 (Issue 25)

4. A fire assay home study course (1989)

5. Fire Assay Home Study Course By Jim V. Humble, and updated in 2006
   https://www.actionmining.com/product/fire-assay-home-study-course/

6. Modern Mercury Amalgamation Manual
   https://www.actionmining.com/product/modern-mercury-amalgamation-manual/



--------Verification of Jim Humbles gold mining background.---

Since sodium chlorite is used to purify water, Jim thought that it might help rid them of the pathogen that was causing their illness. He gave his companions some of the stabilized oxygen and within hours, the men were back on their feet, feeling completely well. This raised some questions in Jim's mind. Did this water purifier really kill the malaria?

The malaria parasite infects and kills over a million people each year. This was the beginning of Jim's search to understand what had happened. He began successfully experimenting with his mixture of stabilized oxygen on himself and the local natives who had contracted malaria.

Jim later discovered for himself that when the sodium chlorite solution comes into contact with stomach acid or any acid, it produces a substance called chlorine dioxide. Jim would later discover that chlorine dioxide cured much more than malaria.

Over the next decade, Jim spent a significant amount of time experimenting on himself using chlorine dioxide, and ultimately helped people in some of the poorest regions of the world including South America, Mexico, and several African countries. He was using chlorine dioxide to cure malaria, typhoid fever, dengue fever, HIV and other serious diseases.

In 2006 Jim published his first book titled, "The miracle mineral supplement of the 21st-century." It was in this book that Mr. Humble recounted the story of his initial discovery, subsequent self-experimentation, and adventures discovering the healing benefits of chlorine dioxide.

He also gave detailed instructions for anyone to inexpensively prepare this substance for themselves.

PDF version of book:

The Miracle Mineral Supplement of the 21st Century Part 1 (request links: theuniversalantidote@protonmail.com)

The Miracle Mineral Supplement of the 21st Century Part 2 (request links: theuniversalantidote@protonmail.com)

Over the next few years, chlorine dioxide or what came to be known as MMS, became an internet sensation and many people began to share how they were being helped by this substance.

Internet chat groups formed and other early social networks began to develop and spread the news of its benefits. From 2006 to 2010, the human use and popularity of chlorine dioxide under the name MMS continued to grow, and it was in 2010 that a government and media campaign began in order to deter people from using chlorine dioxide. The media and FDA reported that chlorine dioxide was a poisonous bleach and its consumption could result in injury or death.

From 2010 up until the current year of 2020, the main stream media and the FDA have continued their relentless attack on the human use of chlorine dioxide and anyone who would promote its use in the treatment of human disease.

Now let's think about this critically for a moment. From the mid-1970s to 2010 a wide range of industries, have been using and developing chlorine dioxide products without any media outcry and without any FDA warnings about this being a toxic poisonous bleach. Then when it's discovered that anyone can safely make and use chlorine dioxide to cure a broad range of human diseases without a doctor, the FDA and the mainstream media begin a fear campaign against chlorine dioxide to scare humanity away from this simple yet amazing substance.

Are you beginning to see the picture?

They can't ban the substance because it's so widely used in so many industries. Chlorine dioxide has been available for human and animal use since the 1970s but it was when a common old gold miner by the name of Jim humble discovered how easy it was to make and treat yourself with chlorine dioxide that the establishment comes out with false information and misleading scare tactics to keep people from personally experiencing the power of chlorine dioxide for themselves.

There's so much more that I would like to add with regard to the historical review but we'll have to save that for another video.

So now that we've summed up a brief review of the history let's move on to our first question... Is chlorine dioxide safe for human use?

Let's stop here for a minute and talk about bleach. It is true that chlorine dioxide is used in the paper industry as a bleaching agent and this is where much of the controversy arises.

The anti-chlorine dioxide crowd has one argument and one argument only against chlorine dioxide.

This argument is simply propaganda. Here's why.

As a nurse, I regularly give my patients many dangerous substances like Coumadin, a blood thinner which is used as rat poison, chemotherapy, some of which are used as chemical weapons, and salt water for hydration which is a poison in high concentrations.

https://www.nature.com/articles/nrcardio.2017.172

https://chemoth.com/types/alkylating

https://www.healthline.com/health/sodium-chloride

All of these substances can be beneficial for humans but can also be highly toxic and even cause death when given in large amounts or inappropriately. The toxicity has everything to do with the dose amount and it has nothing to do with the label placed on the substance.

The same is true for chlorine dioxide. For chlorine dioxide to be used as a bleaching agent, the solution concentration will be on average 5% which equals 50,000 ppm.

Dosing used for human health ranges from 000003% to .02% solution." When chlorine dioxide is used appropriately in the minuscule quantities required to eliminate pathogen's and benefit human health, it's totally safe.

https://www.pulpandpaperonline.com/doc/measurements-in-chlorine-dioxide-clo2-bleachi-0001

So the bleach propaganda argument which initially scared me away from chlorine dioxide is completely invalid with reference to how chlorine dioxide is used for internal and external human use.

Here's a quote from Scotmas group, experts in the field of chlorine dioxide disinfection:

"While chlorine dioxide has “chlorine” in its name, its chemistry is radically different from that of chlorine.

As we all learned in high school chemistry, we can mix two compounds and create a third that bears little resemblance to its parents. For instance, by mixing two parts of hydrogen gas with one of oxygen - liquid water is the formed. We should not be misled by the fact that chlorine and chlorine dioxide share a word in common. The chemistries of the two compounds are completely different."

https://www.scotmas.com/chlorine-dioxide/why-is-clo2-different-to-chlorine.aspx

So now let's dig into safety. Is chlorine dioxide safe?

The answer to this question is yes and no. Yes, it is safe if it is used appropriately, and no it is not safe if it is used inappropriately. This is true for any chemical, medicine, or substance that is applied to the human body.

Because of chlorine dioxide's safe track record, It is used widely as a water purifier and is being used as a safe decontaminant in many industries including the food and beverage, medical, agricultural, pharmaceutical, and sanitation. Any place where you need to kill all of the bacteria, fungus, and viruses’ chlorine dioxide is becoming known as the safest and most effective choice available.

Chlorine dioxide was used to safely sterilize the senate offices after an anthrax attack in Washington DC in 2001 and it has been used to safely clean up Ebola virus hot zones.

https://www.newscientist.com/article/dn1494-biocidal-gas-could-kill-anthrax-in-infected-buildings/

https://www.army.mil/article/136641/Natick_plays_key_role_in_helping_to_fight_spread_of_Ebola/

When used appropriately, chlorine dioxide is safe and is one of the few chemicals that does not harm the environment.

Precautions and discretion should be used as would be appropriate with any chemical, medication, herb, or substance used for medicinal purposes.

There are a number of different ways that the users of Chlorine dioxide introduce this substance onto and into their bodies. The primary methods of use are topical and oral consumption.

For the purposes of this discussion about safety, I'm going to cover the methods that are commonly tested in the scientific research literature which include oral consumption, inhalation, and ophthalmic.

One of the main reasons why chlorine dioxide is replacing chlorine bleach in many water treatment facilities is because its byproducts do not react with organic compounds in the same way as chlorine bleach. The byproducts of chlorine dioxide are safe and not harmful for human consumption. Safety studies performed since the 1970s have shown that chlorine dioxide when used appropriately is safe for human consumption. More recent animal studies have also helped to identify safe levels of chlorine dioxide for oral and inhalation use.

Let's look at a few of those studies. In 2017, a safety study was performed using mice. Part of this study was performed in order to determine the safety and efficacy of chlorine dioxide when inhaled and taken orally. The conclusion for the inhaled chlorine dioxide was that compared to the control group "inhalation of 10 and 20 ppm of chlorine dioxide (for a full straight 24 hour period) did not cause irritation in the mice." and there was no significant difference between the control and the test group.

In the same study, the conclusion for the oral dosing of chlorine dioxide was "In the subchronic oral toxicity test, 0, 5, 10, 20, and 40 ppm chlorine dioxide was prepared to feed the mice. Clinical observations of the mice showed no abnormality and no mortality after 90 days for the control and test groups....administration of up to 40 ppm chlorine dioxide to mice for 90 days is nontoxic..."

...And again in the same study, 50 ppm showed no significant symptoms in a rabbit ophthalmic eye irritation test.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5369164/#__ffn_sectitle

In another animal study 100 mg/l, which is 100 ppm chlorine dioxide was added to every liter of drinking water for 30 days and toxicity on blood components was evaluated, they evaluated a wide range of blood parameters and they found no significant effects on any of these parameters.

Note: (glucose-6-phosphate dehydrogenase (G-6-PD), red blood cells, hematocrit, mean corpuscular volume, mean corpuscular hemoglobin, mean corpuscular hemoglobin

concentration, reticulocyte count, and osmotic fragility)
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1569033/pdf/envhper00463-0036.pdf

In another study, human volunteers drank chlorine dioxide in solution up to 24 ppm and showed no adverse effects.

https://pubmed.ncbi.nlm.nih.gov/6520727/

In another study from 1979, Honeybees, which are usually very susceptible to any toxicity, were fed high doses of 10 to 100 ppm chlorine dioxide in their water supply and showed no ill effects. And not only that, when the concentration was kept between 10-100 ppm this significantly increased the longevity of the bees.

https://academic.oup.com/jee/article-abstract/65/1/19/2210444?redirectedFrom=fulltext

Lockett, J., Oxodene: Longevity of Honey Bees, Journal of Econ. Entomology, vol. 65,No. 1, Feb. 1972

In another study, rats were exposed continuously to inhaled chlorine dioxide gas at 0.05 ppm or 0.1 ppm for 24 hours/day and 7 days/week for 6 months. The study concluded that gas up to 0.1 ppm, exceeding the level effective against microbes, exposed to whole body in rats continuously for six months was not toxic.

These rats breathed low concentrations for six months continuously and had no adverse side effects.

Abstract:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3298712/

Full document: (may take a couple of moments to open)

https://www.researchgate.net/profile/Cheolsung_Lee/publication/221845890_Six-month_low_level_chlorine_dioxide_gas_inhalation_toxicity_study_with_two-week_recovery_period_in_rats/links/540eb9750cf2f2b29a3a9d93/Six-month-low-level-chlorine-dioxide-gas-inhalation-toxicity-study-with-two-week-recovery-period-in-rats.pdf?origin=publication_detail

In another study performed in Japan, school children had a significantly reduced incidence of absenteeism during a period when low concentrations of chlorine dioxide was disbursed throughout the classroom. These children were being exposed to safe levels of chlorine dioxide and received the benefit of fewer sick days.

https://www.researchgate.net/publication/228351686_Effect_of_chlorine_dioxide_gas_of_extremely_low_concentration_on_absenteeism_of_schoolchildren

Full PDF: (may take a couple of moments to open)

https://www.researchgate.net/profile/Norio_Ogata/publication/228351686_Effect_of_chlorine_dioxide_gas_of_extremely_low_concentration_on_absenteeism_of_schoolchildren/links/548968ba0cf268d28f09625a/Effect-of-chlorine-dioxide-gas-of-extremely-low-concentration-on-absenteeism-of-schoolchildren.pdf?origin=publication_detail

According to the centers for disease control, "Chlorine dioxide is not mutagenic or carcinogenic in humans."

https://www.cdc.gov/infectioncontrol/guidelines/disinfection/sterilization/other-methods.html

According to the United States Environmental Protection Agency in a study carried out in 1981, 198 people were exposed to 5 ppm chlorine dioxide for three months and the EPA researchers failed to identify any significant exposure-related effects when compared to the control group of 118 people.

https://www.tandfonline.com/doi/abs/10.1080/00039896.1981.10667601

A study was carried out on chlorine dioxide and it's metabolites in 1982 and this was the conclusion:

"Within the limits of the study, the relative safety of oral ingestion of chlorine dioxide and its metabolites, chlorite and chlorate, was demonstrated by the absence of detrimental physiological response."

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1569027/pdf/envhper00463-0059.pdf?fbclid=IwAR0mat3plg8xlh-oiBCK95_NM25A3xFVIU2cyACCZSApyM-kf1ZksAdmLoM

On Page 1 of the EPA completed review of chlorine dioxide it states: "At this time, products containing chlorine dioxide and sodium chlorite are intended for agricultural, commercial, industrial, medical and residential use." On page 2 it states: "Chlorine dioxide and sodium chlorite do not appear to produce a toxic metabolite produced by other substances."

https://www3.epa.gov/pesticides/chem_search/reg_actions/reregistration/red_PC-020503_3-Aug-06.pdf

To exemplify just how safe chlorine dioxide is, the pharmaceutical company, frontier pharmaceuticals, has produced a variety of FDA approved safe products containing chlorine dioxide that include oral rinse and skin care products, and the founder of the company, Howard Alliger, even has a patent for using chlorine dioxide to eliminate cancer. The patent states the following: "Chlorine dioxide (ClO2), a strong oxidant, can safely be injected into a subject's body, including a tumor, although the compound has not yet been utilized as a cancer treatment in this manner.

It goes on to say, "ClO2 is highly penetrating, and generally considered nontoxic—as demonstrated by its application in deep wounds, 3rd degree burns, and use in oral and topical diseases."

Homepage Frontier Pharmaceuticals:

https://frontierpharm.com

https://patents.google.com/patent/US10463690B2/en

Citations are given for the research papers that validate this statement. These can be found in the pdf document listed in the description of this documentary.

There are dozens of research papers that extol the benefits and safety of properly applied chlorine dioxide for human wound management and microbial control. In 2014, the Journal of Advances in Skin and Wound Care published an article that stated," Chlorine dioxide appears to be a safe biologically acceptable antiseptic wound irrigate that does not appear to interfere with cosmetic outcomes."

https://pubmed.ncbi.nlm.nih.gov/24343388/

And from the international dentistry journal published in 2004 it states, "the effectiveness of topical chlorine dioxide (0.8%) in the management of chronic atrophic candidiasis was demonstrated. ClO2 provided a safe and clinically effective option."

https://pubmed.ncbi.nlm.nih.gov/15218896/

And just so you understand what a .8% solution is let me illustrate. 0.8% when converted to parts per million equals 8,000 ppm.

The typical oral dosing that people use when ingesting chlorine dioxide orally is less than 100 ppm and typically less than 50 ppm. So as an oral rinse chlorine dioxide was safe and clinically effective at a dose 80 times greater than what is used to receive the beneficial effects through oral ingestion.

Chlorine dioxide is even being used medically for the treatment of cancer in France. French physician Laurent Schwartz has been treating patients using a protocol that includes chlorine dioxide. The literature can be reviewed at cancertreatmentjournal.com.

https://www.cancertreatmentjournal.com/articles/chlorine-dioxide-as-a-possible-adjunct-to-metabolic-treatment.html

-----Below was removed from documentary but good information.-----

And not only is chlorine dioxide safe when used appropriately, Scientific research indicates that chlorine dioxide neutralizes many different environmental toxins including herbicides, pesticides, pharmaceutical residues and more.

Publication . Thesis . 1988. The removal of phenols from oily wastewater by chlorine dioxide

https://explore.openaire.eu/search/publication?articleId=od_____2485::082608b5ddc2948692e57ef0569f6259

Application of chemical oxidation processes for the removal of pharmaceuticals in biologically treated wastewater

https://lup.lub.lu.se/search/ws/files/6224458/3412272.pdf

Oxidation of pharmaceuticals by chlorine dioxide in biologically treated wastewater

https://backend.orbit.dtu.dk/ws/files/7633696/Hey_et_al_2012_Postprint_.pdf

Decontamination of Microorganisms and Pesticides from Fresh Fruits and Vegetables: A Comprehensive Review from Common Household Processes to Modern Techniques

https://onlinelibrary.wiley.com/doi/full/10.1111/1541-4337.12453

Examination of degradation and ecotoxicology of pethoxamid and metazachlor after chlorine dioxide treatment

https://link.springer.com/article/10.1007/s10661-020-08392-1

Ben, W., Shi, Y., Li, W., Zhang, Y., & Qiang, Z. (2017). Oxidation of sulfonamide antibiotics by chlorine dioxide in water: kinetics and reaction pathways. *Chemical Engineering Journal, 327*, 743–750.

https://www.sciencedirect.com/science/article/abs/pii/S1385894717311051?via%3Dihub

Chen, Q., Wang, Y., Chen, F., Zhang, Y., & Liao, X. (2014). Chlorine dioxide treatment for the removal of pesticide residues on fresh lettuce and in aqueous solution. *Food Control, 40*, 106–112.

https://www.sciencedirect.com/science/article/abs/pii/S0956713513006178?via%3Dihub

----Above was removed from the documentary to decrease length but good information----

When typical users ingest chlorine dioxide by mouth, they are going to be consuming mixtures that range from about 10 ppm to 100 ppm. So the range of dosing is within or just slightly above the doses that showed no abnormality and no mortality after 90 days of chronic daily use in the animal studies previously mentioned.

Thousands of people, including myself, have experimentally consumed chlorine dioxide for months at a time within the 10-100 ppm dosage range. I'm not stating that long-term chronic daily use is recommended, but I'm stating that people have performed long-term chronic daily use experiments without harm. Like any good medicine, chlorine dioxide should be used appropriately to help restore and improve human health.

A full review of all of the documents mentioned in this safety section can be found through the link in the description of this documentary.

In summary, when used appropriately in the low doses required to neutralize pathogens Chlorine dioxide has been proven safe. When used inappropriately in high doses chlorine dioxide can be dangerous and it must be used with caution.

The third question that I needed answered as I began my research into chlorine dioxide was "Is chlorine dioxide effective for destroying pathogens including viruses, bacteria, and fungus and producing other beneficial oxidative effects. And to be more specific is it effective at doing this with direct human application both outside and inside the body?

Let's first look at the evidence for the overall effectiveness of chlorine dioxide's ability to kill viruses, bacteria, and fungus. And then we will take a look at the effectiveness with regard to human application.

One thing you have to keep in mind with regard to effectiveness studies is that to my knowledge, in the United States, there have been no started or completed human trials authorized by the existing medical establishment for the internal use of chlorine dioxide with any virus, bacteria, or fungus and there have been hundreds if not thousands of research projects into its external and disinfectant use.

Fortunately, there have been a few "unofficial" remarkable human studies completed and we live in the digital age where it is almost impossible to completely eliminate information.

Unfortunately, instead of embracing the incredible results and jumping into action with more studies, the results were quickly discredited and buried after the powers that be classified them as "never happening" or "unauthorized".

So let's get started looking into the in vitro research.

To start here's a quote from the Encyclopedia of Food Microbiology (Second Edition), 2014

"Chlorine dioxide is 3 to 4 times as powerful as sodium hypochlorite as a sanitizing agent and is generally effective against all bacteria and viruses."

https://www.sciencedirect.com/topics/medicine-and-dentistry/chlorine-dioxide

From the Travel and Tropical Medicine Manual (fifth edition), 2017:

"Chlorine dioxide is capable of inactivating most water-borne pathogens, including Cryptosporidium, at practical doses and contact times. It is at least as effective a bactericide as chlorine and in many cases superior. It is far superior as a virucide."

https://www.sciencedirect.com/topics/medicine-and-dentistry/chlorine-dioxide

From the International Travel Health Guide (2006-2007), 13th Edition:

"Chlorine dioxide is an extremely effective disinfectant, which rapidly kills bacteria, viruses, and Giardia, and is also effective against Cryptosporidium. ClO2 also improves taste and odor, destroys sulfides, cyanides, and phenols, controls algae, and neutralizes iron and manganese ions. It is an effective biocide at concentrations as low as 0.1 ppm (parts per million) and over a wide pH range. It is ten times more soluble in water than chlorine, even in cold water. Unlike iodine, chlorine dioxide has no adverse effects on thyroid function. Chlorine dioxide is widely used by municipal water treatment facilities.

The term "chlorine dioxide" is misleading because chlorine is not the active element. Chlorine dioxide is an oxidizing, not a chlorinating agent. ClO2 penetrates the cell wall and reacts with amino acids in the cytoplasm within the cell, killing the microorganism. The by-product of this reaction is chlorite, which is harmless to humans."

https://www.sciencedirect.com/topics/medicine-and-dentistry/chlorine-dioxide

In the same study mentioned earlier that looked at oral, inhaled, and ophthalmic safety limits the researchers found that "antimicrobial activity in vitro was more than 98.2% reduced when concentrations of chlorine dioxide were 5 and 20 ppm for bacteria and fungi, respectively;" it stated "excellent antimicrobial activity was observed for both bacteria and fungi." In the study, antiviral inhibition was examined for H1N1, influenza B, and enteroviris 71, and there was a greater than 50% inhibitory effect with a 2 minute exposure to 100 ppm of chlorine dioxide.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5369164/#__ffn_sectitle

It's important to note that this safety and effectiveness study was specifically being carried out because a chlorine dioxide solution can be and is directly applied to food and human hygiene products and for preventative health measures. (See screenshot below). In other words, they know it works extremely well on the outside, and they wanted to make sure that it is safe for internal use because it's so effective against all pathogens.

3. Results

In this study, a UC-1 containing 2000 ppm chlorine dioxide in water was produced through the electrolytic method with food-grade salt (99% NaCl) and RO water as the starting reactants. Subsequently, the chlorine dioxide was purified through a film and dissolved in RO water. Because a chlorine dioxide solution can be directly applied to food or human hygiene or preventative health measures, its safety and efficacy were investigated.

In a 2010 study, CD at concentrations ranging from 1 to 100 ppm produced potent antiviral activity, inactivating ≥ 99.9% of the viruses with a 15 sec treatment for sensitization. The antiviral activity of CD was approximately 10 times higher than that of sodium hypochlorite which is standard bleach.

https://www.jstage.jst.go.jp/article/bio/15/2/15_2_45/_article

In a 2008 study of the Influenza A virus Infection, a randomized controlled trial was performed with mice and yielded the following amazing results.

10 mice were exposed to aerosolized influenza A and aerosolized chlorine dioxide at (0.03 ppm) simultaneously for 15 minutes. A control group of 10 mice were exposed to only the aerosolized influenza A for 15 minutes.

Sixteen days after exposure, none of the mice exposed to the chlorine dioxide influenza A group had died, but 7 out of 10 mice in the influenza only control group died. That is a 70% fatality for the mice that did not receive aerosolized chlorine dioxide.

https://pubmed.ncbi.nlm.nih.gov/18089729/

https://web.archive.org/web/20190814231801/http://www.seirogan.co.jp/en/research_dev/eiseidata.html#ancher1

Did you catch that? Extremely low doses of chlorine dioxide protected 100% of those mice from influenza.

Chlorine dioxide out performs other disinfectants and is safer than any other.

In this study, eleven disinfectants were put to the test against some of the most common and harmful bacteria. Chlorine dioxide had the highest biocidal activity out of all eleven.

https://link.springer.com/article/10.1007%2FBF01569799

Chlorine dioxide inactivates HIV in vitro.

In a 1993 study, Chlorine dioxide inactivated HIV-1 in the presence of blood and in the presence of medical supplies.

https://pubmed.ncbi.nlm.nih.gov/8228160/

Chlorine dioxide is effective at inactivating and destroying human papilloma virus (HPV).

https://onlinelibrary.wiley.com/doi/full/10.1002/jmv.25666

Five of the most common bacterial pathogens have been tested against chlorine dioxide and here are some of the results

5 ppm of chlorine dioxide in water decreased E. coli. by 99.999% in 60 seconds.

https://www.sciencedirect.com/science/article/pii/S0168160518300217

ACINETOBACTER BAUMANNII a multi-drug resistant bacteria which can cause pneumonia and meningitis

was killed by chlorine dioxide at 100 ppm in 60 seconds.

https://pubmed.ncbi.nlm.nih.gov/25672403/

The bacteria which causes typhoid fever was killed off by a 10 minute exposure to 5 ppm chlorine dioxide gas.

https://www.e-sciencecentral.org/articles/SC000027941

https://www.e-sciencecentral.org/upload/jpvm/pdf/JPVM-41-162.pdf

PSEUDOMONAS AERUGINOSA which is a drug resistant bacteria that causes pneumonia was completely killed by exposure to 10 ppm of chlorine dioxide for 60 seconds.

https://pubmed.ncbi.nlm.nih.gov/25672403/

Chlorine dioxide is a certified biocide and here is a running list of microorganisms which includes bacteria, viruses, and fungi that it is known to inactivate.

https://www.prokleanservices.com/assets/images/CL02PROVEN.pdf

There are many more studies on the efficient destroying power of chlorine dioxide and those studies can be found through a link in the description to a PDF handbook for chlorine dioxide references.

The incredible power and potency of chlorine dioxide to destroy pathogens that cause human suffering and misery cannot be overstated.

Now let's take a look at the available research for chlorine dioxide for direct external and internal human application along with some interesting animal studies.

In a Japanese study that looked at the continuous use of extremely low concentrations of chlorine dioxide. School children were exposed to 0.01-0.03 ppm in the air continuously, and there was a significant decline in student absenteeism during the 38 day trial period, and strongly suggests the usefulness of extremely low-concentration ClO2 gas to prevent respiratory viral diseases.

(may take a couple of moments to open the document below)

https://www.researchgate.net/profile/Norio_Ogata/publication/228351686_Effect_of_chlorine_dioxide_gas_of_extremely_low_concentration_on_absenteeism_of_schoolchildren/links/548968ba0cf268d28f09625a/Effect-of-chlorine-dioxide-gas-of-extremely-low-concentration-on-absenteeism-of-schoolchildren.pdf?origin=publication_detail

Chlorine dioxide is recognized as a biocompatible wound antiseptic irrigant.

This means that it can be used in human and animal wounds to help reduce infection and inflammation without causing any type of irritation or negative effects on routine healing. In fact, chlorine dioxide products have been shown to significantly improve wound healing time in animal studies. As a side note treatment of deep surgical wounds with chlorine dioxide has also

taken place in veterinary medicine and the results have been quite remarkable. Chlorine dioxide was shown to be completely safe and biocompatible and there was significant improvement in wound healing outcomes.

https://journals.lww.com/aswcjournal/Abstract/2014/01000/Activated_Chlorine_Dioxide_Solution_Can_Be_Used_as.6.aspx#

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3362038/

https://pdfs.semanticscholar.org/8824/f87d6a6b1a45edce16641cc4ca2f209bda18.pdf

https://arxiv.org/pdf/1304.5163.pdf

https://pubmed.ncbi.nlm.nih.gov/3946914/

https://pubmed.ncbi.nlm.nih.gov/24343388/

Studies have been carried out by frontier pharmaceuticals with their chlorine dioxide products for the treatment of non-healing diabetic ulcers with striking results.

https://cdn.shopify.com/s/files/1/0414/2833/files/An_Overall_View_Cl02.pdf?1961

Multiple studies have been carried out on the use of chlorine dioxide for oral health, and several products have been developed by different companies which utilize it as a post-surgical oral rinse and general use oral rinse to treat periodontal disease, oral infections, canker sores, bad breath and more. Frontier pharmaceuticals, The company that was founded by Howard Alliger, offers a whole line of chlorine dioxide products for external and oral rinse use. They have products that cure toenail fungus, canker sores, oral infections, and chronic sinus infections.

https://pubmed.ncbi.nlm.nih.gov/15218896/

https://www.researchgate.net/publication/5227382_Plasma_membrane_damage_to_Candida_albicans_caused_by_chlorine_dioxide_CLO2

https://frontierpharm.com/collections/oral-care

https://www.oracareproducts.com/activated-clo2.html

https://www.snootspray.com

https://frontierpharm.com/collections/skin-care

Candida albicans is a big problem when it comes to fungal overgrowth caused by antibiotic overuse and denture use in the elderly. This overgrowth can cause significant human health problems. In a pilot study of oral Candida, chlorine dioxide provided a safe and clinically effective option in the management of chronic candidiasis.

https://pubmed.ncbi.nlm.nih.gov/15218896/

https://www.researchgate.net/publication/5227382_Plasma_membrane_damage_to_Candida_albicans_caused_by_chlorine_dioxide_CLO2

A research study on dairy cows with a chlorous acid-chlorine dioxide Teat Dip showed a reduced incidence of staph. aureus infection of the udder by over 90%

https://pubmed.ncbi.nlm.nih.gov/9749396/

"In the preliminary clinical trial that took place in 1982,' a physician stated that Alcide (which is a patented form of chlorine dioxide) induced prompt remission of perioral herpes symptoms and rapid resolution of the lesions in 15 of 16 cases. These patients have had no recurrence in 6 months. Also five of the six patients with genital herpes had prompt remission and no recurrence."

Journal of applied toxicology, volume 2, issue 3

Article: Toxicity of Alcide

Mohamed S. Abdel-Rahman Sammy E. Gerges Howard Alliger

First published: June 1982

(A. R. Shalita, Internal report from Department of Medicine,

Division of Dermatology, Downstate Medical Center, State

University of New York, May 1, 1979.)

In 2012, a study took place in Uganda. The International Red Cross, Uganda Red Cross, and a group called the Water Reference Center had members present that conducted the study and documented the results. In the study, 154 people tested positive for malaria and 154 were cured of malaria within 48 hours.

After the study was conducted by the local Red Cross, the International Red Cross authorities denied that the entire thing took place and refused to verify the results.

The study was documented on video by several people, and these videos made their way online. Unfortunately, the malaria study documentary has been banned multiple times from YouTube but can be found on alternative video platforms like Brighteon and BitChute and those links are provided in the PDF document that you can find in the description of this video.

YouTube: https://youtu.be/WKIfzf3hDjM

Brighteon: https://www.brighteon.com/5825082196001

Telegram link: https://t.me/mms_health_videos/206

LBRY.tv: https://lbry.tv/@mmstestimonials:e/LEAKED-ProofTheRedCrossCured154MalariaCasesWithMMS:0

In a more recent preliminary trial, 100 patients with serious illness from COVID-19 were cured within 48 hours with chlorine dioxide. These preliminary studies were carried out in the country of Ecuador by licensed physicians who were desperate to find a true solution for so many of the serious COVID-19 patients that were dying by the hundreds.

One brave doctor first cured himself using chlorine dioxide and then after several other doctors recovered with chlorine dioxide, it was offered as an alternative treatment with consent to severe cases.

All 100 patients that participated had significant improvement within 48 hours and achieved a complete recovery. This preliminary study was carried out with the assistance of biophysicist Andreas Kalcker who has been a longtime advocate of chlorine dioxide and speaks internationally on the subject.

One of my main purposes in showing you all of this research data is to help you see the contrast between what you see coming from the main stream news sources saying that chlorine dioxide is a toxic bleach and the reality that chlorine dioxide is a safe, powerful, and effective substance.

Here you have a substance that anyone can make or buy and when used appropriately it can bring health and healing where nothing else can. You can literally make enough of this to last a lifetime for less than $100, and it has been known to cure everything from the common cold to cancer.

Do you remember Howard Alliger, the guy that founded Alcide Corporation and frontier pharmaceuticals? He filed a patent in 2017 that utilizes chlorine dioxide to cure cancer. In the patent information, he provides experimental research that was performed with mice that showed a complete tumor regression within 48 hours of injection. That's right! It killed cancer tumors in less than 48 hours.

https://www.dioxidodecloro.wiki/Alliger_Cancer%20patent%202018.pdf

As I said previously, the internal human use studies are few and far between, but the same cannot be said for the anecdotal reports from all over the world.

From written testimony reports to video testimonies, there have been hundreds if not thousands of reports.

Many of these have been banned from media platforms like YouTube, Facebook, and Google search engine. The locations of these testimonies can be found in the PDF document found in the description of this video.

There has been a quietly growing grass roots movement of people using chlorine dioxide to self-treat disease and they have been using chlorine dioxide to cure a wide range of infectious diseases including antibiotic resistant bacterial infections, malaria, influenza, hepatitis, and more. Others have had some remarkable results relieving diseases such as arthritis, cancer, and other inflammatory diseases.

Time and my own personal limitations to perform interviews and compile interview data prevents me from chronicling the thousands of stories that I could compile. Here are some recent interviews and stories that I have compiled but this doesn't even scratch the surface as to the alleviation of human suffering that chlorine dioxide has brought to the world.

Earlier in this documentary, I mentioned Dave who is a missionary to Africa and has been helping people there with chlorine dioxide since 2007. In May of 2020, I was able to interview Dave over video chat. Here are some clips from that interview. The entire interview can also be found on my brighteon.com video channel and my BitChute backup channel.

(Clips from Dave's interview)

In this next interview you'll meet Steve. In his early 20s he had a chronic illness that resulted in two open-heart surgeries and multiple cases of pneumonia. In March 2020, he contracted what appeared to be a very severe case of COVID-19. He relates his initial discovery of chlorine dioxide and his rapid recovery from severe illness.

(Steve interview)

This is Anna. Anna struggled with debilitating Lyme disease for months before she discovered chlorine dioxide. She was bedridden and unable to walk and is on her way to full recovery.

(Anna Interview)

In this next video you'll meet Lindsay Wagner. Lindsay Wagner is an actress who you might recognize from the 1970s TV series called The Bionic Woman. She suffered from a severe skin disease that modern medicine could not fix. Her discovery of chlorine dioxide and her rapid healing are a true testimony to this chemical wonder.

(clip of Lindsay Wagner)

https://abc7.com/news/bionic-woman-actress-says-substance-known-as-mms-worked-for-her/1578875/

https://www.brighteon.com/979d1d09-cb4f-432f-a67b-bde895820167

I could not make this documentary without mentioning the genesis2church of health and healing. They have been instrumental in helping thousands of people from all around the world to learn about and receive the beneficial effects of properly used chlorine dioxide.

In spite of an incessant disinformation campaign along with overwhelming persecution and harassment, they have continued to proclaim the truth about chlorine dioxide and they have also produced many instructional videos that help common people learn to make and use chlorine dioxide.

They have also produced hundreds of short video testimonials of people from all around the world. These video testimonials have provided a voice for each individual person to share about their healing experience and have served as a verifying record as to the effectiveness and healing power of chlorine dioxide.

However most if not all of them have been banned, deleted, and erased from all major media platforms. The PDF in the description of this video will provide you with link references where you can find all of these video testimonies as well as instructional videos for making and using chlorine dioxide for yourself. For the purposes of this documentary, I am going to provide just a few clips of some of these video testimonies to give you an idea of the wide range of disease processes that chlorine dioxide has helped.

I am aware that all of these reports are simply anecdotal testimonies of people's experiences. If there were just a couple of them, they would not be convincing. However, after you watch hundreds of videos and read hundreds of written testimonies there has to be some point at which anecdotal evidence leads to common sense deductions.

(clips of video testimonials from Genesis to church)

This is Maggie. Maggie's partner first introduced her to chlorine dioxide in 2019, and she thought that he was crazy. He had previously discovered chlorine dioxide when working to restore his own health after a battle with some serious health conditions.

In February 2020 Maggie and her partner both became extremely ill with respiratory symptoms. They both began taking chlorine dioxide and had a rapid recovery from their illnesses. This was the beginning of Maggie's healing journey. She is overcoming chronic sinus infections, chronic fatigue, herpes and more. A link to the full interview is in the pdf document.

(Maggie Stern interview)

A mass awakening occurred in June 2020 during the COVID-19 pandemic. Because of its successful use by multiple doctors in South America, the country of Bolivia authorized the legal use of chlorine dioxide for the treatment of COVID-19.. Physicians were allowed to provide their patients with a voluntary option to receive chlorine dioxide as an oral treatment. The astounding testimonies and stories of people's recovery from severe COVID-19 began to flow into Spanish media outlets and these testimonies started appearing on YouTube, Facebook, Twitter, and other social media platforms. As quickly as they appeared they began to be censored. Here is a collection of short video testimonies of both physicians and patients.

(video testimonies from Central America and South America)

Janika is from Estonia and first discovered chlorine dioxide or as she knew it MMS when her infant son became extremely ill and the doctors had given up and told her to prepare for the worst. This set her on a quest to find a cure for her son before it was too late.

(Janika Veski Interview)

In my 25 years of experience as a critical care nurse, I have never encountered a more amazing substance than chlorine dioxide. I hope that this documentary has helped explain why chlorine dioxide when used appropriately is safe, effective, and beneficial for human health and healing.

And I hope that this documentary will lead to more openness from the healthcare community so that proper human trials can occur and chlorine dioxide can see its full potential for the benefit of mankind.

Section 2: Full List of References from My Research on Chlorine Dioxide

During this journey of discovery, I compiled a large list of literature references. There is no way that I could have included all of the very interesting findings in a single video that anyone would take the time to watch so I have included the full list here with hyperlinks so that you can do your own research. This list is not complete and new information that I gather may be added occasionally.

These references are crudely divided into safety and efficacy study as indicated in the subheadings.

Safety Studies

Efficacy and Safety Evaluation of a Chlorine Dioxide Solution (2017)

Full HTML: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5369164/

Full PDF: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5369164/pdf/ijerph-14-00329.pdf

Effects of the acute rising dose administration of chlorine dioxide, chlorate and chlorite to normal healthy adult male volunteers

https://pubmed.ncbi.nlm.nih.gov/6520727/

The effect of disinfection on viability and function of baboon red blood cells.

Valeri CR1, Ragno G, MacGregor H, Pivacek LE

Author information

Photochemistry and Photobiology, 28 Feb 1997, 65(3):446-450

https://pubmed.ncbi.nlm.nih.gov/9077129/

"In the study using the non-activated sodium chlorite, which was performed as a control for the activated sodium chlorite studies, there was actually more damage to the red blood cells at the 15 mM concentration. The 24-hour posttransfusion survival value was 75% for the red blood cells in the control studies and 87% for the red blood cells treated with activated sodium chlorite."

Journal AWWAVolume 82, Issue 10

Research & Technology

Comparative Subchronic Toxicity Studies of Three Disinfectants

F. Bernard Daniel Lyman W. Condie Merrel Robinson Judy A. Stober

First published: 01 October 1990

https://awwa.onlinelibrary.wiley.com/doi/abs/10.1002/j.1551-8833.1990.tb07038.x

Increased longevity of honeybees with chlorine dioxide and sucrose

https://academic.oup.com/jee/article-abstract/65/1/19/2210444?redirectedFrom=fulltext

Lockett, J., Oxodene: Longevity of Honey Bees, Journal of Econ. Entomology,

vol. 65,No. 1, Feb. 1972

Kinetics of Cl02 and effects of Cl02, Cl02-, and Cl03- in drinking water on blood glutathione and hemolysis in rat and chicken

https://pubmed.ncbi.nlm.nih.gov/547024/

The effects of chlorine dioxide and sodium chlorite on erythrocytes of A/J and C57L/J mice

G S Moore et al. J Environ Pathol Toxicol. 1980 Sep.

https://pubmed.ncbi.nlm.nih.gov/7462915/

(unable to locate full source document)

Effects of alcide® gel on fetal development in rats and mice. II

Samy E. Gerges Mohamed S. Abdel-Rahman Gloria A. Skowronski Stanley Von Hagen

First published: April 1985

https://pubmed.ncbi.nlm.nih.gov/3998374/

Pharmacodynamics of alcide, a new antimicrobial compound, in rat and rabbit

J Scatina et al. Fundam Appl Toxicol. 1984 Jun.

https://pubmed.ncbi.nlm.nih.gov/6745537/

Toxicity of alcide

Journal of applied toxicology Volume 2, issue 3 (1982)

Mohamed S Abdel – Rahmen, Sammy E. Gerges, Howard Alliger

https://onlinelibrary.wiley.com/doi/pdf/10.1002/jat.2550020308

Improvement of the Air Quality in Student Health Centers With Chlorine Dioxide

https://pubmed.ncbi.nlm.nih.gov/20169486/

Pharmacokinetics of Alcide, a Germicidal Compound in Rat

J Scatina et al. J Appl Toxicol. 1983 Jun.

https://pubmed.ncbi.nlm.nih.gov/6619502/

FDA 3 part per million guidance:

https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/cfrsearch.cfm?fr=173.300

https://www.fda.gov/media/110849/download

An unusual case of reversible acute kidney injury due to chlorine dioxide poisoning (drank 250 mL of concentrated chlorine dioxide)

https://www.tandfonline.com/doi/full/10.3109/0886022X.2013.819711

Six-month low level chlorine dioxide gas inhalation toxicity study with two-week recovery period in rats

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3298712/

Full: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3298712/pdf/1745-6673-7-2.pdf

TOXICOLOGICAL REVIEW OF CHLORINE DIOXIDE AND CHLORITE

https://cfpub.epa.gov/ncea/iris/iris_documents/documents/toxreviews/0648tr.pdf

World health organization document

https://www.who.int/ipcs/publications/cicad/en/cicad37.pdf

Study of chlorine dioxide and its metabolites in man (1981)

https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=20016SZ3.TXT

Mechanistic aspects of ingested chlorine dioxide on thyroid function: impact of oxidants on iodide metabolism

https://pubmed.ncbi.nlm.nih.gov/3816729/

Full: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1474311/pdf/envhper00440-0239.pdf

Effects of chlorine dioxide on thyroid function in the African green monkey and the rat

R M Harrington et al. J Toxicol Environ Health. 1986.

https://pubmed.ncbi.nlm.nih.gov/3761383/

Chlorine dioxide and hemodialysis

https://pubmed.ncbi.nlm.nih.gov/2184465/

"Deleterious effects of moderately high levels of these oxychlorines have been demonstrated experimentally on red blood cells, thyroid function, and development in laboratory animals. Adverse effects in controlled prospective studies in humans and in actual use situations in community water supplies have as yet failed to reveal clear evidence of adverse health effects."

"Again, very limited human experience has failed to reveal adverse health effects."

Effect of Chlorine Dioxide Water Disinfection on Hematologic and Serum Parameters of Renal Dialysis Patients

https://pubmed.ncbi.nlm.nih.gov/3452295/

Evaluation of the immunomodulatory effects of the disinfection by-product, sodium chlorite, in female B6C3F1 mice: a drinking water study.

https://www.ncbi.nlm.nih.gov/m/pubmed/11452397/

Chlorine dioxide water disinfection: a prospective epidemiology study

G E Michael et al. Arch Environ Health. Jan-Feb 1981.

https://pubmed.ncbi.nlm.nih.gov/7469487/

Viracidal Blood Bag System

https://patents.google.com/patent/EP0382018B1/en

Bayer inc. holds patent

Metabolism and pharmacokinetics of alternate drinking water disinfectants

M S Abdel-Rahman et al. Environ Health Perspect. 1982 Dec.

https://pubmed.ncbi.nlm.nih.gov/7151761/

Full document:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1569026/pdf/envhper00463-0026.pdf

Up to 200 ppm determined safe in 90 day oral exposure in rats.

COMPARATIVE SUBCHRONIC TOXICITY STUDIES OF THREE DISINFECTANTS

https://awwa.onlinelibrary.wiley.com/doi/abs/10.1002/j.1551-8833.1990.tb07038.x

Effect of Exogenous Glutathione, Glutathione Reductase, Chlorine Dioxide, and Chlorite on Osmotic Fragility of Rat Blood In Vitro

https://journals.sagepub.com/doi/pdf/10.3109/10915818409009081

Toxicological Effects of Chlorite in the Mouse

G S Moore et al. Environ Health Perspect. 1982 Dec.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1569033/pdf/envhper00463-0036.pdf

When exposed to a maximum level of 100 ppm chlorine dioxide in their drinking water, neither

A/J or C57L/J mice exhibited any hematologic changes.

Subchronic Toxicity of Chlorine Dioxide and Related Compounds in Drinking Water in the Nonhuman Primate J P Bercz et al. Environ Health Perspect. 1982

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1569048/

Oxidative Damage to the Erythrocyte Induced by Sodium Chlorite, in Vivo

W P Heffernan et al. J Environ Pathol Toxicol. Jul-Aug 1979.

https://pubmed.ncbi.nlm.nih.gov/528853/

Haag, H.B., The Effects on Rats of Chronic Administration of Sodium Chlorite and

Chlorine Dioxide in Drinking Water, Med. Col. Virginia, Dept. Phys, & Pharm.,

Report to Olin Corp., February 7, 1949

"Lack of toxicity on a long term, but low level basis is dramatically illustrated by two separate studies where rats,78 and honeybees,79 were fed ClO2 in high doses over a two year period. No ill effects were noted with up to 100 ppm added to water supply"

Health effects of drinking water disinfectants and disinfectant by-products

Richard J. Bull

Environmental Science & Technology 1982 16 (10), 554A-559A

DOI: 10.1021/es00104a719

https://pubs.acs.org/doi/pdf/10.1021/es00104a719

Toxicity of Chlorine Dioxide in Drinking Water

M. S. Abdel-Rahman, D. Couri, R. J. Bull First Published July 1, 1984

https://journals.sagepub.com/doi/10.3109/10915818409009082

Full paper: https://journals.sagepub.com/doi/pdf/10.3109/10915818409009082

Chlorine dioxide water disinfection: a prospective epidemiology study

G E Michael et al. Arch Environ Health. Jan-Feb 1981.

https://pubmed.ncbi.nlm.nih.gov/7469487/

Controlled Clinical Evaluations of Chlorine Dioxide, Chlorite and Chlorate in Man by Judith R. Lubbers,* Sudha Chauan,* and Joseph R.Bianchine*

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1569027/pdf/envhper00463-0059.pdf?fbclid=IwAR0mat3plg8xlh-oiBCK95_NM25A3xFVIU2cyACCZSApyM-kf1ZksAdmLoM

"However, by the absence of detrimental physiological responses within the limits of the study, the relative safety of oral ingestion of chlorine dioxide and its metabolites, chlorite and chlorate, was demonstrated."

Effect of chlorine dioxide and metabolites on glutathione dependent system in rat, mouse and chicken blood D Couri et al. J Environ Pathol Toxicol. 1979 Dec.

https://pubmed.ncbi.nlm.nih.gov/547025/

Influence of chlorine dioxide on cell death and cell cycle of human gingival fibroblasts.

https://www.ncbi.nlm.nih.gov/m/pubmed/18819741/

Title: Chloroxyanion residue on seeds and sprouts after chlorine dioxide sanitation of alfalfa seed
https://www.ars.usda.gov/research/publications/publication/?seqNo115=348990

"Data generated by this study show that even when high concentrations of chlorine dioxide gas are used to treat alfalfa seed, undesirable chemical residues are not present in edible sprouts grown from those seeds. The study suggests that chemical residues are not a major obstacle for the development of chlorine dioxide gas as safe treatment for edible sprout production."

Title: Chloroxyanion residues in cantaloupe and tomatoes after chlorine dioxide gas sanitation
https://www.ars.usda.gov/research/publications/publication/?seqNo115=319864

"Data from this study suggest that chlorine dioxide sanitation of edible vegetables and melons can be conducted without the formation of unwanted residues in edible fractions."

Chlorine dioxide water disinfection: a prospective epidemiology study

G E Michael et al. Arch Environ Health. Jan-Feb 1981.

https://pubmed.ncbi.nlm.nih.gov/7469487/

Chlorine Dioxide Efficacy Studies

Antiviral Research

Acidified sodium chlorite solution: A potential prophylaxis to mitigate impact of multiple exposures to COVID-19 in frontline health-care providers

https://www.tandfonline.com/doi/full/10.1080/21548331.2020.1778908

https://www.tandfonline.com/doi/pdf/10.1080/21548331.2020.1778908?needAccess=true

Effects of ozone, chlorine dioxide, chlorine, and monochloramine on Cryptosporidium parvum oocyst viability.

https://www.ncbi.nlm.nih.gov/m/pubmed/2339894/

Evaluation of the Antiviral Activity of Chlorine Dioxide and Sodium Hypochlorite against Feline Calicivirus, Human Influenza Virus, Measles Virus, Canine Distemper Virus, Human Herpesvirus, Human Adenovirus, Canine Adenovirus and Canine Parvovirus

https://www.jstage.jst.go.jp/article/bio/15/2/15_2_45/_article

Mechanisms of inactivation of poliovirus by chlorine dioxide and iodine.

https://aem.asm.org/content/aem/44/5/1064.full.pdf

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC242149/

Chlorine Dioxide Inactivation of Cryptosporidium parvum Oocysts and Bacterial Spore Indicators

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC92971/

Full:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC92971/pdf/am002993.pdf

Protective effect of low-concentration chlorine dioxide gas against influenza A virus infection.

https://www.ncbi.nlm.nih.gov/m/pubmed/18089729/

https://www.microbiologyresearch.org/docserver/fulltext/jgv/89/1/60.pdf

Inactivation of Human Immunodeficiency Virus by a Medical Waste Disposal Process Using Chlorine Dioxide

https://pubmed.ncbi.nlm.nih.gov/8228160/

Antiviral Effect of Chlorine Dioxide against Influenza Virus and Its Application for Infection Control

https://benthamopen.com/contents/pdf/TOANTIMJ/TOANTIMJ-2-71.pdf

The behavior of viruses on disinfection by chlorine dioxide and other disinfectants

https://academic.oup.com/femsle/article/44/3/335/554262

Virucidal Activity of Fogged Chlorine Dioxide- and Hydrogen Peroxide-Based Disinfectants against Human Norovirus and Its Surrogate, Feline Calicivirus, on Hard-to-Reach Surfaces

https://www.frontiersin.org/articles/10.3389/fmicb.2017.01031/full

Inactivation of Enteric Adenovirus and Feline Calicivirus by Chlorine Dioxide

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1151811/

Inactivation of Airborne Bacteria and Viruses Using Extremely Low Concentrations of Chlorine Dioxide Gas

Norio Ogata et al. Pharmacology. 2016;97(5-6):301-6.

doi: 10.1159/000444503.

https://pubmed.ncbi.nlm.nih.gov/26926704/

ACTIVITY OF CHLORINE DIOXIDE AGAINST VIRAL INFECTIONS

IN THE AIR AND ON SURFACES, IN THE LIGHT OF SCIENTIFIC RESEARCH

https://www.gov.pl/attachment/4110f7ee-c4dc-4a66-9e70-a8d38dc0c97

ACTIVITY OF CHLORINE DIOXIDE AGAINST VIRAL INFECTIONS

IN THE AIR AND ON SURFACES, IN THE LIGHT OF SCIENTIFIC RESEARCH

Min Jin et al. Environ Sci Technol. 2013 May 7;47(9):4590-7.

https://pubmed.ncbi.nlm.nih.gov/23560857/

Inactivation of simian rotavirus SA11 by chlorine, chlorine dioxide, and monochloramine.

https://www.unboundmedicine.com/medline/citation/6091546/Inactivation_of_simian_rotavirus_SA11_by_chlorine_chlorine_dioxide_and_monochloramine_

Mechanisms of inactivation of hepatitis A virus in water by chlorine dioxide

https://pubmed.ncbi.nlm.nih.gov/15016528/

Investigation on Virucidal Activity of Chlorine Dioxide. Experimental Data on Feline Calicivirus, HAV and Coxsackie B5

https://pubmed.ncbi.nlm.nih.gov/18274345/

Can chlorine dioxide prevent the spreading of coronavirus or other viral infections? Medical hypotheses

https://akjournals.com/view/journals/2060/107/1/article-p1.xml

Inactivation Kinetics and Mechanism of a Human Norovirus Surrogate on Stainless Steel Coupons via Chlorine Dioxide Gas

https://aem.asm.org/content/aem/82/1/116.full.pdf

Disinfection kinetics of murine norovirus using chlorine and chlorine dioxide

Mi Young Lim et al. Water Res. 2010 May;44(10):3243-51.

doi: 10.1016/j.watres.2010.03.003.

https://pubmed.ncbi.nlm.nih.gov/20356616/

The Ability of Two Chlorine Dioxide Chemistries to Inactivate Human Papillomavirus-Contaminated Endocavitary Ultrasound Probes and Nasendoscopes

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7497195/pdf/JMV-92-1298.pdf

Comparing the Efficacy of Chlorine, Chlorine Dioxide, and Ozone in the Inactivation of Cryptosporidium Parvum in Water From Parana State, Southern Brazil

Juliana Tracz Pereira et al. Appl Biochem Biotechnol. 2008 Dec;151(2-3):464-73.

doi: 10.1007/s12010-008-8214-3. Epub 2008 May 23.

" Chlorine dioxide at 5 ppm inactivated 90.56% of oocysts after 90 min of contact"

https://pubmed.ncbi.nlm.nih.gov/18498060/%20

Inactivation of human and simian rotaviruses by chlorine dioxide.

https://www.ncbi.nlm.nih.gov/m/pubmed/2160222/

Full:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC184410/pdf/aem00086-0169.pdf

Inactivation of human immunodeficiency virus by a medical waste disposal process using chlorine dioxide.

https://www.ncbi.nlm.nih.gov/m/pubmed/8228160/

Chlorine dioxide inhibits the replication of porcine reproductive and respiratory syndrome virus by blocking viral attachment

Zhenbang Zhu et al. Infect Genet Evol. 2019 Jan.

https://pubmed.ncbi.nlm.nih.gov/30395996/

Clinical use of Chlorine dioxide in the prevention of coronavirus spread through dental aerosols.

https://in.dental-tribune.com/news/clinical-use-of-chlorine-dioxide-in-the-prevention-of-coronavirus-spread-through-dental-aerosols/

Surrogate testing suggests that chlorine dioxide gas exposure would not inactivate Ebola virus contained in environmental blood contamination

John J Lowe et al. J Occup Environ Hyg. 2015 Sep.

https://pubmed.ncbi.nlm.nih.gov/25955403/

Chlorine dioxide inactivation of enterovirus 71 in water and its impact on genomic targets

Environ Sci Technol 2013 May 7;47(9):4590-7. doi: 10.1021/es305282g. Epub 2013 Apr 16.

https://pubmed.ncbi.nlm.nih.gov/23560857/

Antibacterial Research

Journal of Water Process Engineering Volume 26, December 2018, Pages 46-54

Chlorine dioxide inactivation of Pseudomonas aeruginosa and Staphylococcus aureus in water: The kinetics and mechanism (5 ppm resulted in a 5-log reduction 99.999% kill)

https://www.sciencedirect.com/science/article/abs/pii/S2214714418302836

Chlorine Dioxide is a Better Disinfectant than Sodium Hypochlorite against Multi-Drug Resistant Staphylococcus aureus, Pseudomonas aeruginosa, and Acinetobacter baumannii

https://pubmed.ncbi.nlm.nih.gov/25672403/

The Inhibitory Effect of Alcide, an Antimicrobial Drug, on Protein Synthesis in Escherichia Coli

J Scatina et al. J Appl Toxicol. 1985 Dec

https://pubmed.ncbi.nlm.nih.gov/2416793/

[Bactericidal effects of chlorine dioxide by respiratory inhibition]. (Full article not available. Chinese)

"CONCLUSION: ClO2-induced damages to the mitochondria were positive correlated with the death rates, but respiratory inhibition was not the primary target site for cell killing."

https://www.ncbi.nlm.nih.gov/m/pubmed/22126085/?i=2&from=/22799207/related

Mode of bacterial inactivation by chlorine dioxide

https://www.sciencedirect.com/science/article/abs/pii/0043135480901219

Chlorine Dioxide is a Better Disinfectant than Sodium Hypochlorite against Multi-Drug Resistant Staphylococcus aureus, Pseudomonas aeruginosa, and Acinetobacter baumannii

(100 ppm killed all strains in 60 seconds)

https://pubmed.ncbi.nlm.nih.gov/25672403/

Inactivation of Methicillin-Resistant ***Staphylococcus aureus*** (MRSA) and Vancomycin-Resistant ***Enterococcus faecium*** (VRE) on Various Environmental Surfaces by Mist Application of a Stabilized Chlorine Dioxide and Quaternary Ammonium Compound-Based Disinfectant

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7196689/pdf/UOEH_7_487806.pdf

Microbial Decontamination of a 65-Room New Pharmaceutical Research Facility

https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.359.5433&rep=rep1&type=pdf

Efficacy of chlorine dioxide on Escherichia coli inactivation during pilot-scale fresh-cut lettuce processing (5 ppm in water decreased E. Coli. by 99.999% in 60 seconds)

https://www.sciencedirect.com/science/article/pii/S0168160518300217

(5 ppm killed 99.999% E. coli in 15 minutes) Bactericidal effects of chlorine dioxide gas against E. coli and S. Typhimurium in vitro

https://www.e-sciencecentral.org/upload/jpvm/pdf/JPVM-41-162.pdf

Systematic Evaluation of the Efficacy of Chlorine Dioxide in Decontamination of Building Interior Surfaces Contaminated with Anthrax Spores

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2869126/

Disinfection effect of chlorine dioxide on air quality control in Armed Forces General Hospital of Taiwan

https://advancedbiocide.com/uploads/pdf/scientific_studies/13_0332_lin_disinfection_ns0504.pdf

Effect of extremely low-concentration gaseous chlorine dioxide against surface Escherichia coli, Pseudomonas aeruginosa and Acinetobacter baumannii in wet conditions on glass dishes

https://bmcresnotes.biomedcentral.com/track/pdf/10.1186/s13104-020-4925-5

Chlorine dioxide inactivation of bacterial threat agents

https://sfamjournals.onlinelibrary.wiley.com/doi/pdf/10.1111/j.1472-765X.2011.03095.x

Inactivation of bacterial biothreat agents in water, a review

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4819249/pdf/nihms772550.pdf

Reduction in the incidence of hospital-acquired MRSA following the introduction of a chlorine dioxide 275 ppm based disinfecting agent in a district general hospital

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6451552/

Efficiency of Chlorine Dioxide as Bactericide

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1058342/pdf/applmicro00361-0144.pdf

Denaturation of protein by chlorine dioxide: oxidative modification of tryptophan and tyrosine residues

Norio Ogata. Biochemistry. 2007.

https://pubmed.ncbi.nlm.nih.gov/17397139/

Inactivation of Mycobacterium Tuberculosis and Mycobacterium Bovis by 14 Hospital Disinfectants (Chlorine dioxide completely inactivated microbacterium tuberculosis)

https://pubmed.ncbi.nlm.nih.gov/1928175/

Germicidal Activity of a Chlorous Acid-Chlorine Dioxide Teat Dip and a Sodium Chlorite Teat Dip During Experimental Challenge With Staphylococcus Aureus and Streptococcus Agalactiae

https://pubmed.ncbi.nlm.nih.gov/9749396/

"The chlorous acid-chlorine dioxide teat dip reduced new intramammary infections (IMI) caused by Staph. aureus by 91.5% and reduced new IMI caused by Strep. agalactiae by 71.7%."

Full article: https://www.sciencedirect.com/science/article/pii/S0022030298758096

Comparing the efficacy of hyper-pure chlorine-dioxide with other oral antiseptics on oral pathogen microorganisms and biofilm in vitro (2013)

https://pubmed.ncbi.nlm.nih.gov/24060558/

Antibacterial effect of chlorine dioxide and hyaluronate on dental biofilm (2010) (may take a few moments to load)

https://www.researchgate.net/profile/Tara_Taiyeb-Ali/publication/235920262_Antibacterial_effect_of_chlorine_dioxide_and_hyaluronate_on_dental_biofilm/links/5452f6fa0cf26d5090a380cf.pdf

ANTIBACTERIAL EFFECTS OF 0.1% CHLORINE DIOXIDE ON ACTINOMYCES SP. AS AN AGENT OF BLACK STAIN (2017)

https://innovareacademics.org/journals/index.php/ijap/article/download/24514/13596

An In Vitro Comparative Study Determining Bactericidal Activity of Stabilized Chlorine Dioxide and Other Oral Rinses

https://www.freshclor.in/research-papers/9.pdf

Title: Application of chlorine dioxide to lessen bacterial contamination during broiler defeathering

https://www.ars.usda.gov/research/publications/publication/?seqNo115=251728

"Carcasses sprayed with chorine dioxide during de-feathering had significantly lower numbers of Campylobacter and E. coli than carcasses treated with water spray control de-feathering. Chlorine dioxide de-feathering treatment also resulted in lower prevalence of Salmonella than control de-feathering."

Direct Human Studies:

Efficacy Evaluation of a Chlorine Dioxide Containing Toothpaste (DioxiBrite™) on Plaque and Gingivitis

https://cdn.shopify.com/s/files/1/0414/2833/files/Mueller-Joseph-Efficacy_Evaluation_of_a_Chlorine_Dioxide_Containing_Toothpaste_DioxiBrite_on_Plaque_and_Gingivitis.pdf

Biocompatible Antiseptic Wound Irrigant

Jonathan H Valente et al. Adv Skin Wound Care. 2014 Jan.

https://pubmed.ncbi.nlm.nih.gov/24343388/

Effects of a mouthwash with chlorine dioxide on oral malodor and salivary bacteria: a randomized placebo-controlled 7-day trial. (2010)

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2831889/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2831889/pdf/1745-6215-11-14.pdf

Efficacy of a chlorine dioxide-containing mouthrinse in oral malodor

https://pubmed.ncbi.nlm.nih.gov/11199703/

A Comparison of Wound Healing Rate Following Treatment with Aftamed and Chlorine Dioxide Gels in Streptozotocin-Induced Diabetic Rats

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3362038/

Full article:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3362038/pdf/ECAM2012-468764.pdf

Effects of a mouthwash with chlorine dioxide on oral malodor and salivary bacteria: a randomized placebo-controlled 7-day trial

http://europepmc.org/article/MED/20152022

Activated Chlorine Dioxide Solution Can Be Used as a Biocompatible Antiseptic Wound Irrigant

https://journals.lww.com/aswcjournal/Abstract/2014/01000/Activated_Chlorine_Dioxide_Solution_Can_Be_Used_as.6.aspx#

CONCLUSION:

The authors report the use of a novel antimicrobial irrigation solution. Chlorine dioxide appears to be a safe biologically acceptable antiseptic wound irrigant that does not appear to interfere with cosmetic outcomes.

The objective of this study was to compare cosmesis at 3 to 4 months and infection in simple lacerations irrigated with normal saline versus activated chlorine dioxide

Odor reduction potential of a chlorine dioxide mouthrinse.

https://www.ncbi.nlm.nih.gov/m/pubmed/10518851/

Frascella J, Gilbert R, Fernandez P. Odor reduction potential of a chlorine dioxide mouthrinse. J Clin Dent. 1998;9(2):39-42. PMID: 10518851.

Efficacy of a chlorine dioxide-containing mouthrinse in oral malodor. (2000)

J Frascella et al. Compend Contin Educ Dent. Mar;21(3):241-4, 246, 248 passim; quiz 256

https://www.ncbi.nlm.nih.gov/m/pubmed/11199703/

Efficacy of chlorine dioxide mouthwash in reducing oral malodor: A 2-week randomized, double-blind, crossover study. (2018)

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6203824/pdf/CRE2-4-206.pdf

Clinical and microbiological efficacy of chlorine dioxide in the management of chronic atrophic candidiasis: an open study. (2004)

https://www.ncbi.nlm.nih.gov/m/pubmed/15218896/

Full article:

https://www.dentistselect.net/pdf/Candidiasis_Study.pdf

Phosphate buffer-stabilized 0.1% chlorine dioxide oral rinse for managing medication-related osteonecrosis of the jaw. (2017)

https://www.ncbi.nlm.nih.gov/m/pubmed/29251459/

Srinivas Rao Myneni Venkatasatya et al. Am J Dent. 2017 Dec;30(6):350-352.

An in vitro study comparing a two-part activated chlorine dioxide oral rinse to chlorhexidine

https://www.perioimplantadvisory.com/clinical-tips/hygiene-techniques/article/16411500/an-in-vitro-study-comparing-a-twopart-activated-chlorine-dioxide-oral-rinse-to-chlorhexidine

"Background: Chlorhexidine is considered the “gold standard” for antiplaque agents. However, there are side effects associated with long-term use of chlorhexidine. This study compared a chlorine dioxide-based mouth rinse (Oracare) with chlorhexidine for antimicrobial activity and an ability to remove volatile sulfur compounds (VSCs) generated by the periodontal pathogen Porphyromonas gingivalis."

The comparative effect of acidified sodium chlorite and chlorhexidine mouthrinses on plaque regrowth and salivary bacterial counts.

Yates R, Moran J, Addy M, Mullan PJ, Wade WG, Newcombe R.

J Clin Periodontol. 1997 Sep;24(9 Pt 1):603-9.

doi: 10.1111/j.1600-051x.1997.tb00236.x.

https://www.dentistselect.net/pdf/CLO2Studies.pdf

Demonstrating that chlorine dioxide is a size-selective antimicrobial agent and high purity ClO2 can be used as a local antiseptic

https://arxiv.org/pdf/1304.5163.pdf

https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0079157

Comparison of Antipseudomonad Activity of Chlorine Dioxide Chlorous Acid Containing Gel With Commercially Available Antiseptics

https://pubmed.ncbi.nlm.nih.gov/3717733/

Disinfection Efficiency of Chlorine Dioxide Gas in Student Cafeterias in Taiwan

Ching-Shan Hsu et al. J Air Waste Manag Assoc. 2013 Jul;63(7):796-805.

doi: 10.1080/10962247.2012.735212.

https://pubmed.ncbi.nlm.nih.gov/23926849/

Effect of chlorine dioxide gas of extremely low concentration on absenteeism of schoolchildren

https://www.researchgate.net/publication/228351686_Effect_of_chlorine_dioxide_gas_of_extremely_low_concentration_on_absenteeism_of_schoolchildren

Full PDF:

https://www.researchgate.net/profile/Norio_Ogata/publication/228351686_Effect_of_chlorine_dioxide_gas_of_extremely_low_concentration_on_absenteeism_of_schoolchildren/links/548968ba0cf268d28f09625a/Effect-of-chlorine-dioxide-gas-of-extremely-low-concentration-on-absenteeism-of-schoolchildren.pdf

Pesticide/Herbicide/Pollutant Cleanup Research

Good Overview:

https://www.scotmas.com/chlorine-dioxide/chemical-reactivity-of-clo2.aspx

The removal of phenols from oily wastewater by chlorine dioxide

https://vtechworks.lib.vt.edu/bitstream/handle/10919/45159/LD5655.V855_1988.H89.pdf?

"Most of phenolic compounds can be destroyed by chlorine dioxide within 15 minutes"

Oxidation of pharmaceuticals by chlorine dioxide in biologically treated wastewater

https://backend.orbit.dtu.dk/ws/files/7633696/Hey_et_al_2012_Postprint_.pdf

"Biologically treated wastewater spiked with a mixture of 56 active pharmaceutical ingredients (APIs) was treated with 0-20 mg/L chlorine dioxide (ClO2) solution in laboratory-scale experiments. Wastewater effluents were collected from two wastewater treatment plants in Sweden, one with extended nitrogen removal (low COD) and one without (high COD). About one third of the tested APIs resisted degradation even at the highest ClO2 dose (20 mg/L), while others were reduced by more than 90% at the lowest ClO2 level (0.5 mg/L). In the low COD effluent, more than half of the APIs were oxidized at 5 mg/L ClO2, while in high COD effluent a significant increase in API oxidation was observed after treatment with 8 mg/L ClO2. This study illustrates the successful degradation of several APIs during treatment of wastewater effluents with chlorine dioxide."

Decontamination of Microorganisms and Pesticides from Fresh Fruits and Vegetables: A Comprehensive Review from Common Household Processes to Modern Techniques

https://onlinelibrary.wiley.com/doi/full/10.1111/1541-4337.12453

Examination of degradation and ecotoxicology of pethoxamid and metazachlor after chlorine dioxide treatment

https://link.springer.com/article/10.1007/s10661-020-08392-1

Ben, W., Shi, Y., Li, W., Zhang, Y., & Qiang, Z. (2017). Oxidation of sulfonamide antibiotics by chlorine dioxide in water: kinetics and reaction pathways. *Chemical Engineering Journal, 327*, 743–750.

https://www.sciencedirect.com/science/article/abs/pii/S1385894717311051?via%3Dihub

Chen, Q., Wang, Y., Chen, F., Zhang, Y., & Liao, X. (2014). Chlorine dioxide treatment for the removal of pesticide residues on fresh lettuce and in aqueous solution. *Food Control, 40*, 106–112.

https://www.sciencedirect.com/science/article/abs/pii/S0956713513006178

Full document:
https://www.researchgate.net/profile/Fang_Chen73/publication/259518798_Chlorine_dioxide_treatment_for_the_removal_of_pesticide_residues_on_fresh_lettuce_and_in_aqueous_solution/links/5a6b6b66458515b2d055c53a/Chlorine-dioxide-treatment-for-the-removal-of-pesticide-residues-on-fresh-lettuce-and-in-aqueous-solution.pdf

Hey, G., Grabic, R., Ledin, A., la Cour Jansen, J., & Andersen, H. R. (2012). Oxidation of pharmaceuticals by chlorine dioxide in biologically treated wastewater. *Chemical Engineering Journal, 185-186*, 236–242.

https://www.sciencedirect.com/science/article/abs/pii/S1385894712001167?via%3Dihub

Hwang, E., Cash, J. N., & Zabik, M. J. (2002). Chlorine and chlorine dioxide treatment to reduce or remove EBDCs and ETU residues in a solution. *Journal of Agricultural and Food Chemistry, 50*(16), 4734–4742.

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https://doi.org/10.1016/j.cej.2016.10.062

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https://iwaponline.com/wst/article/35/4/129/6045/Degradation-of-herbicides-ametryn-and-isoproturon

Tian, F.-X., Xu, B., Zhang, T.-Y., & Gao, N.-Y. (2014). Degradation of phenylurea herbicides by chlorine dioxide and formation of disinfection by-products during subsequent chlor(am)ination. *Chemical Engineering Journal, 258*, 210–217.

https://doi.org/10.1016/j.cej.2014.07.094

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https://doi.org/10.1016/j.chemosphere.2010.02.015

Wang, Y., Liu, H., Liu, G., Xie, Y., & Ni, T. (2015). Oxidation of diclofenac with chlorine dioxide in aquatic environments: influences of different nitrogenous species. *Environmental Science and Pollution Research, 22*(12), 9449–9456.

https://doi.org/10.1007/s11356-015-4118-2

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https://www.sciencedirect.com/science/article/abs/pii/S0043135405002940?via%3Dihub

Navalon S, Alvaro M, Garcia H (2008) Reaction of chlorine dioxide with emergent water pollutants: product study of the reaction of three beta-lactam antibiotics with ClO2. Water Res 42:1935–1942

https://www.sciencedirect.com/science/article/abs/pii/S0043135407007178

Wang P, He YL, Huang CH (2010) Oxidation of fluoroquinolone antibiotics and structurally related amines by chlorine dioxide: reaction kinetics, product and pathway evaluation. Water Res 44:5989–5998

https://www.sciencedirect.com/science/article/abs/pii/S0043135410005348

Wang P, He YL, Huang CH (2011) Reactions of tetracycline antibiotics with chlorine dioxide and free chlorine. Water Res 45:1838–1846

https://www.sciencedirect.com/science/article/abs/pii/S0043135410008171

MONSANTO-REMOVAL OF GLYPHOSATE BY WATER TREATMENT

http://www.egeis.org/cd-info/WRC-report-UC7374-July-2007-Removal-of-glyphosate-and-AMPA-by-water-treatment.pdf

Degradation of pesticide residues by gaseous chlorine dioxide on table grapes

https://pubag.nal.usda.gov/catalog/6362483

Chlorine dioxide treatment for the removal of pesticide residues on fresh lettuce and in aqueous solution (20 mg/L effective)

https://www.researchgate.net/publication/259518798_Chlorine_dioxide_treatment_for_the_removal_of_pesticide_residues_on_fresh_lettuce_and_in_aqueous_solution

Antifungal Research

Clinical and microbiological efficacy of chlorine dioxide in the management of chronic atrophic candidiasis: an open study

Abdel R Mohammad et al. Int Dent J. 2004 Jun.

https://pubmed.ncbi.nlm.nih.gov/15218896/

Mold Remediation of a Research Facility in a Hospital

https://www.clordisys.com/pdfs/articles/absa_mold_remediation_hospital.pdf

Laboratory Evaluation of the Efficacy of Chlorine Dioxide Fumigation for Remediation of Building Materials Contaminated with Molds, Mycotoxins or Allergens

https://cfpub.epa.gov/si/si_public_file_download.cfm?p_download_id=516320

Plasma membrane damage to Candida albicans caused by chlorine dioxide (CLO2)

https://pubmed.ncbi.nlm.nih.gov/18624985/

Full document:

https://sfamjournals.onlinelibrary.wiley.com/doi/pdf/10.1111/j.1472-765X.2008.02387.x

"Conclusion: At or below MFC, ClO(2) damages the plasma membranes of C. albicans mainly by permeabilization, rather than by the disruption of their integrity. K(+) leakage and the concomitant depolarization of the cell membrane are some of the critical events.

Significance and impact of the study: These insights into membrane damages are helpful in understanding the action mode of ClO(2).

Antimicrobial efficacy of chlorine dioxide against Candida albicans in stationary and starvation phases in human root canal: An *in-vitro* study

https://www.researchgate.net/publication/277940517_Antimicrobial_efficacy_of_chlorine_dioxide_against_Candida_albicans_in_stationary_and_starvation_phases_in_human_root_canal_An_in-vitro_study/fulltext/5ac0105a45851584fa740063/Antimicrobial-efficacy-of-chlorine-dioxide-against-Candida-albicans-in-stationary-and-starvation-phases-in-human-root-canal-An-in-vitro-study.pdf?origin=publication_detail

Plasma membrane damage to Candida albicans caused by chlorine dioxide (CLO2)

https://pubmed.ncbi.nlm.nih.gov/18624985/

Full document:

https://sfamjournals.onlinelibrary.wiley.com/doi/pdf/10.1111/j.1472-765X.2008.02387.x

"**Conclusion:** At or below MFC, ClO(2) damages the plasma membranes of C. albicans mainly by permeabilization, rather than by the disruption of their integrity. K(+) leakage and the concomitant depolarization of the cell membrane are some of the critical events.

Significance and impact of the study: These insights into membrane damages are helpful in understanding the action mode of ClO(2).

Antiparasitic Research

On The Mechanisms Of Toxicity Of Chlorine Oxides Against Malarial Parasites - An Overview By Thomas Lee Hesselink, MD

http://www.vigli.org/MMS/On_The_Mechanisms_Of_Toxicity_Of_Chlorine_Oxides_Against_Malarial_Parasites_By_T-L-Hesselink_MD_2007.pdf

http://bioredox.mysite.com/CLOXhtml/CLOXilus.htm

Inhibition of malaria infection and repellent effect against mosquitoes by chlorine dioxide

https://www.jstage.jst.go.jp/article/mez/64/4/64_203/_pdf/-char/ja

Exposure to Chlorine Dioxide Gas for 4 Hours Renders Syphacia Ova Nonviable

https://www.clordisys.com/pdfs/misc/Pinworm%20Egg%20Inactivation.pdf

Inactivation of parasite transmission stages: Efficacy of treatments on foods of non-animal origin
https://www.sciencedirect.com/science/article/pii/S0924224419300652

Mercury Neutralization Research:

A method of oxidization a gaseous, elemental mercury

https://www.osti.gov/servlets/purl/12435

https://clu-in.org/contaminantfocus/default.focus/sec/Mercury/cat/Treatment_Technologies/

Mercury cannot be destroyed, so treaters have to rely on various methods to capture or recover it, depending on the mercury species present, its concentration, and the waste matrix or media involved. Selecting the appropriate treatment formula depends on the degree of organic destruction required prior to further mercury treatment, the degree of mercury speciation control required by the waste form, and other operating procedures to ensure mercury extraction. The final treatment step in non-thermal processes for mercury wastes generally involves either precipitation to produce a waste that can be retorted or immobilization prior to disposal.

Chemical oxidation is applied to elemental mercury and organomercury compounds to destroy the organics and to convert mercury to a soluble form, such as $HgCl_2$ or HgI_2, which can then be separated from the waste matrix and treated. Oxidizing reagents used in these processes include sodium hypochlorite, ozone, hydrogen peroxide, chlorine dioxide, free chlorine (gas), and proprietary reagents.

Chemical leaching is an aqueous process that depends on the ability of a leaching solution to solubilize mercury and remove it from the waste matrix. The solubilized mercury ideally partitions to the liquid phase, which is filtered off for further treatment (e.g., precipitation, ion exchange, carbon adsorption). This process can remove inorganic forms of mercury from inorganic waste matrices, but it is less effective for removing nonreactive elemental mercury unless the leaching formula is capable of ionizing mercury to an extractable form. Acid leaching is used most commonly to remove mercury from inorganic media.

https://www.tandfonline.com/doi/pdf/10.1080/10473289.2011.642951

is due to hydrolysis. The chlorite ion has a limited ability to act as an oxidizer at higher pH, which may explain the low absorption (Brogren et al., 1998).

The few reports on Hg removal in $NaClO_2$ solutions indicate that a high pH greatly weakens the rate of Hg^0 oxidation (Zhao et al., 2008). Zhao et al. (2008) reported that for high pHs of 11 and 12, the removal efficiency was extremely low (no more than 4%) and decreased as the pH increased, whereas for a low pH of 3.0 (as low as possible), the Hg^0 removal efficiency was ca. 85.5%. Another report (Diaz-Somano et al., 2007) showed that increasing the pH of a solution based on Ca (CaO in distilled water) without any oxidizer in a wet scrubber increases Hg

A new method for oxidation of gaseous, elemental mercury

https://www.osti.gov/biblio/12435

soluble oxidized species. Recently, we have discovered a new method for injection of the oxidizing species that dramatically improves reactant utilization and at the same time gives significant nitric oxide (NO) oxidation as well. Our method uses a diluted oxidizing solution containing chloric acid and sodium chlorate (sold commercially as NOXSORB{trademark}). When this solution is injected into a gas stream containing Hg{sup 0} at about 300 F, we found that nearly 100% of the Hg{sup 0} was removed from the gas phase and was recovered in liquid samples from the test system. At the same time, approximately 80% of the added NO was also removed (oxidized). The effect of sulfur dioxide (SO{sub 2}) on this method was also investigated, and it appears to decrease slightly the amount of Hg oxidized. We are currently testing the effect of variations in oxidizing solution concentration, SO{sub 2} concentration, NO concentration, and reaction time (residence time). « less

Removal of Hg0 with sodium chlorite solution and mass transfer reaction kinetics

https://link.springer.com/article/10.1007/s11431-010-0045-0

Miscellaneous Research:

A pilot study on using chlorine dioxide gas for disinfection of gastrointestinal endoscopes

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4940628/

"The experimental results indicated that disinfecting GI endoscopes using CD gas could reduce the cost of disinfectants while ensuring a high log reduction of spores. Thus, CD gas may be a feasible choice for disinfection of GI endoscopes. Furthermore, this study provides information for decontaminating long and narrow lumens with gaseous sterilants."

An Evaluation of the Use of Chlorine Dioxide (Tristel One-Shot) in an Automated Washer/Disinfector (Medivator) Fitted With a Chlorine Dioxide Generator for Decontamination of Flexible Endoscopes

https://pubmed.ncbi.nlm.nih.gov/11358471/

Relative humidity "RH is a specific factor of the gas sanitizer; an increase in the RH enhances the antimicrobial effect of the ClO2 gas. "

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4959078/

Clinical Evaluation of Chlorine Dioxide for Disinfection of Dental Instruments. (2013)

https://www.ncbi.nlm.nih.gov/m/pubmed/24179967/

Impact of Chlorine Dioxide Gas Sterilization on Nosocomial Organism Viability in a Hospital Room

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3717754/

Periodontal tray application of chlorine dioxide gel as an adjunct to scaling and root planing in the treatment of chronic periodontitis

https://www.sciencedirect.com/science/article/pii/S101390521930495X

Surgical Wound Management in Dogs using an Improved Stable Chlorine Dioxide Antiseptic Solution.

https://pdfs.semanticscholar.org/8824/f87d6a6b1a45edce16641cc4ca2f209bda18.pdf

(Alcide) Controlled wound repair in guinea pigs, using antimicrobials that alter fibroplasia

A J Kenyon et al. Am J Vet Res. 1986Jan;47(1):96-101.

https://pubmed.ncbi.nlm.nih.gov/3946914/

Tristel Company Research

Evaluation of disinfection of flexible nasendoscopes using Tristel wipes: a prospective single blind study

https://www.tristel.com/file?ResourceDownload.File/9057837e-0f6a-46a7-8fbe-c7677cde71ce.pdf

Flexible nasoendoscopy decontamination: a comparison between Rapicide and Tristel wipes, a prospective cohort study

https://www.tristel.com/file?ResourceDownload.File/bdcb2550-ac5b-4e75-8bc3-20b5061ba6bf.pdf

A state-wide survey of disinfection techniques for nasendoscopies in Queensland ENT out-patient departments

https://www.tristel.com/file?ResourceDownload.File/9ab25671-4f6d-4b87-87de-617fe6853e18.pdf

Mycobactericidal activity of chlorine dioxide wipes in a modified prEN 14563 test

https://www.tristel.com/file?ResourceDownload.File/9c3401ef-6b58-42e7-855b-b8a4068c0f12.pdf

A Randomised, single-blind comparison of high-level disinfectants for flexible nasendoscopes
DOI: https://doi.org/10.1017/S0022215116008860

Assessment of occupational exposure to airborne chlorine dioxide of healthcare workers using impregnated wipes during high-level disinfection of non-lumened flexible nasoendoscopes

DOI: https://doi.org/10.1080/15459624.2018.1523617%20

Audit of nasendoscope disinfection practice

DOI: https://doi.org/10.1016/S1479-666X(06)80015-6

Decontamination methods for flexible nasal endoscopes

DOI: https://doi.org/10.12968/bjon.2014.23.15.850

Transvaginal ultrasound probe contamination by the human papillomavirus in the emergency department

DOI: http://dx.doi.org/10.1136/emermed-2012-201407

The Cost of Being Clean: A Cost Analysis of Nasopharyngoscope Reprocessing Techniques

DOI: https://doi.org/10.1002/lary.26770

Sequential cohort study comparing chlorine dioxide wipes with automated washing for decontamination of flexible nasendoscopes

DOI: https://doi.org/10.1017/S0022215112000746

Papers With Other CD Literature References

https://www.prokleanservices.com/assets/images/CL02PROVEN.pdf

https://www.clordisys.com/pdfs/misc/BiologicalEfficacyList.pdf

Section 3: Chlorine Dioxide Patents

Note: This is not a full list of chlorine dioxide patents. The patents listed primarily deal with human application chlorine dioxide patents. There are thousands of chlorine dioxide patents for thousands of different applications.

List of all patents for Howard Alliger and Alcide:

https://patents.google.com/?inventor=Howard+Alliger&oq=Howard+Alliger&page=1

Alcide Full list patents

https://patents.justia.com/assignee/alcide-corporation

xanthan gum for gelling CLO2 and related species

https://patents.google.com/patent/US6039934A/en

Germ killing composition and method

https://patents.google.com/patent/CA1097216A/en

Germ-killing materials

https://patents.google.com/patent/US4330531A/en

Germ killing composition and method

https://patents.google.com/patent/US4084747A/en

Germ-killing composition and method

https://patents.google.com/patent/USRE31779E/en

Chlorine dioxide skin medicating compositions for preventing irritation

https://patents.google.com/patent/US5616347A/en

A method of treating sinusitis, including chronic sinusitis

https://patents.google.com/patent/EP2525802A4/en

Method and compositions for treating cancerous tumors

https://patents.google.com/patent/US10105389B1/en

https://cdn.shopify.com/s/files/1/0414/2833/files/10_105_389_Cancer.pdf

Method and compositions for treating cancerous tumors

https://patents.google.com/patent/US20190000875A1/en

Method and compositions for treating cancerous tumors

https://patents.google.com/patent/US10463690B2/en

Full patent application:

https://www.dioxidodecloro.wiki/Alliger_Cancer%20patent%202018.pdf

Wound disinfection and repair

https://patents.google.com/patent/US5622725A/en

Original Full pdf:

https://patentimages.storage.googleapis.com/6e/b7/8e/69e36a0734aea3/US5622725.pdf

Anti-inflammatory formulations for inflammatory diseases

https://patents.google.com/patent/USRE37263E1/en

Original Full pdf:

https://patentimages.storage.googleapis.com/e9/d7/23/a5c801f180181b/USRE37263.pdf

Composition and procedure for disinfecting blood and blood components

https://patents.google.com/patent/US5019402A/en

Disinfecting oral hygiene compositions and process for using the same

https://patents.google.com/patent/US5100652A/en

Full PDF:

https://patentimages.storage.googleapis.com/46/2d/e2/2fcdd336a55ce0/US5100652.pdf

Method and composition for prevention and treatment of female lower genital tract microbial infections

https://patents.google.com/patent/US5667817A/en

Full PDF:

https://patentimages.storage.googleapis.com/b0/38/73/f18a7e97ca1679/US5667817.pdf

Composition and procedure for disinfecting blood and blood components

Author: Kross

https://patents.google.com/patent/US5019402A/en

original full PDF:

https://patentimages.storage.googleapis.com/94/32/05/496b5db429faa7/US5019402.pdf

Chlorine dioxide gas for use in treating respiratory virus infection

https://patents.google.com/patent/EP1955719B1/en

Slow release gelatin application

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4612836/

"Study on encapsulation of chlorine dioxide in gelatin microsphere for reducing release rate"

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4612836/pdf/ijcem0008-12404.pdf

Sodium chlorite HIV treatment patent:

Use of a chemically-stabilized chlorite matrix for the parenteral treatment of HIV infections

https://patents.google.com/patent/US6086922A/en

Chlorite in the treatment of neurodegenerative disease

https://patents.google.com/patent/US8029826

1989 Viricidal blood bag system

https://patents.google.com/patent/EP0382018A2/en

1988 Disinfecting blood constituents, corneal and scleral tissue

https://patents.google.com/patent/WO1990001315A1/en

1990 Composition and procedure for disinfecting blood and blood components

https://patents.google.com/patent/US5019402A/en

A method to treat blood

https://patents.google.com/patent/WO1988001507A1/en

Method for inactivating viruses in blood using chlorine dioxide
https://patents.google.com/patent/US5240829A/en

Interesting: "The data obtained with both viruses show that a protein load of 0.5% requires a chlorine dioxide concentration of 50 ppm to effect complete viral inactivation. When the albumin level is reduced to 0.05% a chlorine dioxide concentration of 5 ppm is then capable of reducing VSV infectivity at least 5 Logs and HSV-1 at least 6 logs."

Composition and procedure for disinfecting blood and blood components
https://patents.google.com/patent/US5019402A/en

Method of treating HIV by a topical composition
https://patents.google.com/patent/US6200557B1/en

Broad-spectrum antiviral composition with excellent preservation stabilty
https://patents.google.com/patent/US8545898B2/en

Treatment of Non-Oral Biological Tissue with Chlorine Dioxide
https://patents.google.com/patent/US20100196512A1/en

Patent to make chlorine dioxide stable
https://patents.google.com/patent/JPWO2009093540A1/en

In-the-eye use of chlorine dioxide-containing compositions
https://patents.google.com/patent/US5736165A/en

Topical treatment of genital herpes lesions

https://patents.google.com/patent/US4956184A/en

The Portable Chemical Sterilizer (PCS), D-FENS, and D-FEND ALL: Novel Chlorine Dioxide Decontamination Technologies for the Military

Christopher J Doona et al. J Vis Exp. 2014

https://pubmed.ncbi.nlm.nih.gov/24998679/

Injection containing chlorine dioxide and method for making same.
https://patents.google.com/patent/US20190015445A1/en

Chlorine dioxide prepared and used in methods of acting on mammalian stem cells and applications of drugs acting on mammalian stem cells

https://patents.google.com/patent/JP6141997B2/

Chlorine dioxide is currently an internationally recognized substitute for the new generation of the most ideal chlorine agent as a safe disinfectant and cryogen with high medicinal properties and a wide range of medicinal properties. So it has already been widely applied. Organizations in developed countries such as the United States, Western Europe, Canada, Japan, disinfection of chlorine dioxide food and food processing, pharmaceuticals, hospitals and public environments, Approves and recommends the use of antifungal and antiseptic and fresh foods. The World Health Organization (WHO) and the United Nations Food and Agriculture Organization (FAO) have also made chlorine dioxide an A1 safe and efficient disinfectant. In order to suppress the occurrence of carcinogens in drinking water, developed countries in Europe and the United States have already used chlorine dioxide as an alternative to chlorine for disinfecting drinking water. However, chlorine dioxide is not yet accepted by the market as a drug. However, although some patents are related to the use of chlorine dioxide for some disease treatment applications (eg CN102137651A, N101641104A, CN1199633C), these patents show the strong oxidation ability of chlorine dioxide and the skin pathogenic microorganisms. It was only about the use of anti-infective ability by killing. US Pat. No. 5,750,108 mentions that chlorine dioxide stimulates hair follicles to promote hair growth. However, since the concentration is relatively low, the maximum capacity of chlorine dioxide is not exhibited, and thus no obvious hair growth effect is seen. Chinese Patent No. CN102441006A provides an external hair growth solution containing chlorine dioxide, and it is possible in a short time to stimulate a hair loss site to generate new hair, providing a healing case. However, this patent has yet to find a potential mechanism of action of chlorine dioxide on stem cells.

Chlorine dioxide application in preventing and treating plant continuous cropping disease

https://patents.google.com/patent/CN1836515A/en

Cell apoptosis inducer containing chlorine dioxide and use thereof in preparing cosmetics or anti-aging or antineoplastic drugs

https://patents.google.com/patent/WO2016074203A1/en

Disclosed is an injection containing chlorine dioxide in therapeutic applications such as in-vivo stem cell regeneration, anti-tumor and anti-aging.

https://patents.google.com/patent/US20190015445A1/en

Preparation method of pure chlorine dioxide solution and method for treating Ebola virus infection

https://patents.google.com/patent/CN104586880A/en

Composition for preventing oral disease by penetrating polymicrobial oral biofilms and killing oral pathogens

https://patents.google.com/patent/US8926951B2/en

Composition and Method for the Prevention of Oral Disease

https://patents.google.com/patent/US20090016973A1/en

Not a patent but an orphan status medication:

Croatia orphan status for ALS treatment

https://www.ema.europa.eu/en/medicines/human/orphan-designations/eu3131139

Section 4: Negative Reports in the Scientific Literature

Kikuchi-Fujimoto disease presenting after consumption of 'Miracle Mineral Solution' (sodium chlorite)

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4244351/

A Case of Sodium Chlorite Toxicity Managed with Concurrent Renal Replacement Therapy and Red Cell Exchange

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3576492/

Acute sodium chlorite poisoning associated with renal failure

https://pubmed.ncbi.nlm.nih.gov/8290712/

sodium chlorite poisoning:

A case of severe chlorite poisoning successfully treated with early administration of methylene blue, renal replacement therapy, and red blood cell transfusion: case report

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4602424/

Chlorine dioxide poisoning:

An unusual case of reversible acute kidney injury due to chlorine dioxide poisoning

https://www.tandfonline.com/doi/pdf/10.3109/0886022X.2013.819711

Section 5: Social Networks, Books, & People

Since MMS/Chlorine dioxide was first introduced to the public through the efforts of Jim Humble, there have been communities of people that formed chat groups and forums in order to share their experiences and help others who are searching for answers to solve problems that standard medicine could not or would not help. Here I provide links for social networks that exist for this purpose. This list is not exhaustive, but these are the ones that I have come across in my research. I do not mention Facebook Groups at all because there have been so many of them that have been disbanded by the FB thought police.

MeWe Groups:

https://mewe.com/join/mmsmiracleminerals solution

https://mewe.com/join/chlorinedioxidetruth

https://mewe.com/join/coronavirusebolasolutions

Telegram App Groups:

Telegram is an app that can run on your phone or desktop. You can learn about it here: https://telegram.org/

After you install telegram you can find these groups:

The Universal Antidote Video Repository: https://t.me/TheUniversalAntidoteVideos
In the Universal Antidote Video Repository, you can find chlorine dioxide videos including documentaries, testimonials, and instructional information.

MMS Health Videos Channel: https://t.me/mms_health_videos

There are many video testimonials here as mentioned in the documentary. You can search this archive for videos to find them. There is distracting off topic information and you just have to disregard this.

MMS Health Group: https://t.me/joinchat/NCKGOFaA8bQaEp22ad6qvQ

There are many video testimonials here as mentioned in the documentary. You can search this archive for videos to find them. There is distracting off topic information and you just have to disregard this.

CD/MMS Websites:

MMS:

https://mmsforum.io/

https://mmstestimonials.co/

https://jimhumble.co/

https://mmsinfo.org/

https://clo2.tv/

CDS:

https://andreaskalcker.com/en/

https://www.saludprohibida.com/en/

COMUSAV: This is a non-profit group of thousands of doctors, therapists, researchers, and health professionals who are helping others and working with chlorine dioxide solution.

https://comusav.com/en/recursos/

https://comusav.com/en/videoteca/

Important Video Channels:

MMS DIY on Brighteon

MMS DIY on BitChute

Curious Human Productions on Brighteon

Curious Human Productions on BitChute

CLO2 TV News

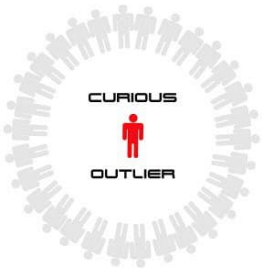
Other Important Books:

Jim Humble Health Recovery Guide Book

Healing the Symptoms Known as Autism: (linked to a free book with permission)

Forbidden Health by Andréas Kalcker

About The Author



The Curious Outlier is a registered nurse with 25 years of critical care experience. He chooses to remain anonyms but can easily be reached at theuniversalantidote@protonmail.com

The Curious Outlier loves educating and inspiring other humans to find their full potential for life, health, and spiritual wellbeing.