

THE WONDERS OF COLLOIDAL SILVER



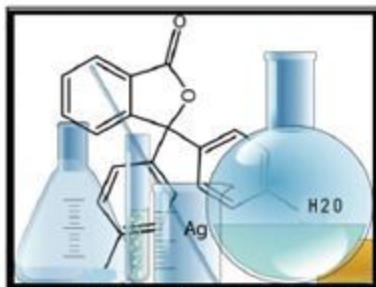
~NATURE'S SUPER ANTIBIOTIC~
REVISED & INDEXED
FOREWORD BY DR. JOHNNIE HAM, M.D.

DHYANA L. COBURN &
PATRICK D. DIGNAN

THE WONDERS OF COLLOIDAL SILVER

NATURE'S SUPER ANTIBIOTIC

Revised & Indexed



The Most Powerful Non-Toxic Antibiotic Available!

DHYANA L. COBURN
AND PATRICK D. DIGNAN
FOREWORD BY DR. JOHNNIE HAM

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REVISED EDITION



FOREWORD

BY DR. JOHNNIE HAM, M.D.

What you are about to read is a fascinating story not only about the science of health, but also a little insight into the finances of health. Dhyana Coburn in her latest update here on Colloidal Silver, or CS, has provided you and I with the information, the evidence and even the techniques to be able to utilize the powerful actions of this incredible, simple substance. As a product of the Western Medicine Medical Training System, I was blessed with some of the best information and tools available in the world to treat health and disease. Perhaps the biggest contribution, however, has been the recent emphasis on evidence-based medicine. Doctors today are being taught to challenge the conventional wisdom and practice of medicine, and see if what we have been trained to do even works. Unfortunately, once leaving the training system, and faced with the challenges of managing a practice, dealing with preauthorizations, insurance companies, billing, and malpractice insurance, and so on, there is often little time left to go back and continue to question how we are practicing our art. We tend to rely on how we were trained, as well as the information presented to us, often by “drug reps” who walk through our doors with free samples and stacks of articles justifying the benefits of their new drug. In a free market, there is certainly a place for that, as long as we balance that marketing with our own research and study. That is where the premium of time usually fails us. We, as practitioners, just do not spend enough time doing our own research. So what this too often means, is that a positive, progressive health solution, that is cheap and does not make anyone a lot of money, will often go unrecognized, and worse, trumped by some who have a market share to lose, as a “fad” or “gimmick.” True, there are plenty of those out there, but that’s where the evidence-based research comes to play. I tell my patients, before you ever consider buying a book on the medical shelves of the bookstore, look in the back at the references. If it is not heavily referenced, with research published in peer-reviewed journals, then be careful about buying the book. I recommend you put it right back on the shelf.

What you will find in this book, is rock-solid evidence, published for years, on the benefits of Colloidal Silver. You will see how it can be used, what to look for when finding it, even methods in which you can make it yourself. The basic property of CS as an antibiotic alone has so many uses, and the side effects virtually nonexistent when used in the right doses. Why? Silver is already one of the essential minerals we need everyday anyway! This is not a foreign substance being introduced to the body, like so many of our medications today. It works at a level of the body's immune system to help you use your own systems to fight the disease, rather than working by itself in some manner not intended by nature. How could you go wrong by actually helping your body to do what it already knows how to do? What a concept!

So, why haven't we heard a lot more about it? Two words. Big Pharma. There is no money in this for a drug company. Dr. Marcia Angell, MD, former editor of the *New England Journal of Medicine*, and an instructor at Harvard Medical School, showed in her book, *The Truth About Drug Companies: How They Deceive Us and What to Do About It*, that the top ten drug companies in the Fortune 500 made more money in one year than all the remainder of the Fortune 500 *combined*. More than Wal-Mart, Exxon, GM, Ford Motor, Bank of America, McDonalds, and 384 other companies! *Combined*! So, when we have a simple, low-cost, little or no-profit treatment, who will promote it?

The answer: people like Dhyana Coburn and her late father Patrick D. Dignan. I love this book because it is real. You can see the passion these two have had for this science. This book has the evidence. It gives directions on how to use CS, what it does, what it can help treat, and how you can make it yourself, as well as what to look out for. I use CS in my practice because it works and its safe. Simple as that. And, in today's world of escalating costs of medical care, this is one that remains inexpensive. Truly, the simple things that can significantly improve our health are right at our fingertips. Eat right, exercise, keep your hormones balanced, and be very careful about the foreign substances you allow on or in your body. Do your own research, but look for the evidence. Dhyana and Patrick have done it for you here for Colloidal Silver. I encourage you to study this book, use it, share it, maybe even give a copy to your doctor. In many cases, that's how I learned about what they don't teach you in Medical School.

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2012 PREFACE

COLLOIDAL SILVER – A HEALTHY SILVER LINING

Colloidal silver is still in the news. After almost two decades of bad press, CS is back, stronger than ever. This new edition will help take the fear out of colloidal silver! Don't let Big Pharma propaganda scare you away from colloidal silver, because it remains the safest antibiotic available.

Because there are still no industry standards for manufacturers to insure quality control, and with no governmental regulation, it is important to know about the quality of the CS product you use. The FDA had a right to blast CS manufacturers for inferior product, but they didn't have the right to deceive you, to rule that colloidal silver products are not considered safe or effective. They didn't tell the whole truth. You will learn: *HOW* some people turned blue, *WHY* you won't, and *WHAT* went wrong. You will also learn the *right* way to make a pure CS product. Nature's alternative to antibiotics still kicks butt. CS is a curious fascination. It is a modern day, natural *wonder drug* that kills bugs, germs, nasty beasties, as well as the evil superbugs.

Clinical research shows it to be effective against HIV/ AIDS, Lyme disease, Streptococcus-A, gonorrhea, Salmonella, cancers, chronic fatigue, yeast infections, sinus infections, gum disease, and hundreds of pathogens and ailments. Research continues to exhibit positive results on testing of a variety of germs in clinical studies across the country. The colloidal particles progressively diffuse throughout the blood and give prolonged therapeutic response. Thousands of people enjoy the benefits of using CS. The CS healing potion is used both internally and externally. It is a tremendous benefit to apply CS to wounds, body piercings, and skin eruptions, such as acne. It can be applied to eyes and other delicate mucus membranes with no irritation because it is extremely gentle and doesn't sting.

Colloidal silver is not a panacea, but it is a *great* alternative to antibiotics. If you are very ill, *by all means*, see your doctor. Doctors can be an amazing blessing. If antibiotics are prescribed, you have a choice to

make. Antibiotics can be incredibly useful. Use discretion. Use common sense. I am not out to dispute the reality that the medical world works its magic in many situations. It is a fact that antibiotics can be effectual, but they are over-prescribed. They are prescribed for the least of symptoms. Use good judgment. Take your doctor's advice into consideration. If you are seriously ill, do what is necessary to get well.

You do your best. I urge you to weigh every situation and make the most appropriate decision based on what you know. Don't take CS in the hopes that it will cure your every ill. On the other hand, you will find that CS does create some very worthy *miracles*.

I have tried to be as accurate as possible. If there are any errors, typos, inaccuracies, oversights, faux pas, or blunders, PLEASE let me know! Thank you!

From my heart,

Dhyana Coburn

*The ultimate court of appeal is observation
and experience, not authority.*

~Aldous Huxley

1995 PREFACE

We have tried to get this *theoretical* information to you as quickly as possible. A tremendous amount of research went into writing this book, most of which was obtained from books, periodicals, brochures, questionnaires, newsletters, and audio tapes, all listed in the bibliography. Some of the research was done through experimentation with colloidal silver generators, different methodologies, and with the colloidal sol (CS) itself. It seems the word *cure* has become illegal to use. All data and claims of *benefits* are, naturally, hypothetical. There are many brilliant men in our scientific world who have done *extensive* research on the healing benefits of colloidal silver. Their *documented laboratory findings* show that CS works effectively as a natural antibiotic and germicide, and promotes healing.

One such brilliant researcher is the late Dr. Robert C. “Bob” Beck, D.Sc.¹, a highly respected, retired University of Southern California physics professor. Although he is not the first person to recommend colloidal silver, Dr. Beck is (as far as we know) the first to recommend a *low voltage system* for making colloidal silver. He came up with the design for a battery operated colloidal silver generator. The use of the 27v D.C. generator has established a proven method of making colloidal silver for *pennies per gallon* instead of *dollars per ounce*. Bob Beck was a prominent physicist and ingenious inventor. Many years ago he invented the original portable strobe light that made photographing in dim light possible. He has also invented a blood electrifier, a pulse-producing low voltage, low frequency, bio-electric instrument he claimed will eliminate the AIDS virus and a number of other microbes. So we feel very indebted to Dr. Bob Beck Thank you.

1997 PREFACE

It's not as if CS just came off the assembly line, it has been around for ages. The FDA approved it as an effective antibiotic *over eighty years ago*. We are treading on very safe ground. Colloidal silver is not an exclusive method of therapy, and we in no way intend to give the impression otherwise. Many intelligent scientists, many of whom are medical doctors, have long supported it.

There are skeptics out there who claim colloidal silver is the *snake oil* of the '90's. A letter in the Journal of the American Medical Association, dated October 18, 1995, claims colloidal manufacturers are “hustlers” and call those who write about it *misguided*. The article calls it the “silver-for-everything-that-ails-you scam” saying, it is no better than *Mississippi mud*. Well, that's all well and fine. Consider the source. The skeptical assertion that there is no proof whatsoever that colloidal silver works is ridiculous. Their claims show disrespect for the eminent scientists who have done *exhaustive studies* of silver in the colloidal state. “The proof of the pudding is in the eating,” as the saying goes. What have you got to lose?

All of the controversy has evidently gotten to the FDA. On January 4th, 1997 CNN-TV and other news sources did a short piece on colloidal silver. The FDA decided the manufacturers of colloidal sols must prove to them (by January 13, 1997) the claims of the cures provided by taking CS are *true*. Although, we must admit that there are *some* manufacturers whose claims are far from the truth, and yes, some of them are practically selling plain water. Trying to manipulate the consumer, there have also been claims by *manufacturers* stressing their product is far superior to other, similar products. Sometimes true, sometimes not. *Consumers beware!* Is the threat. Some manufacturers claim the competition's product may cause one *harm*. This is unfortunate, for in the name of competition, greed prevails, causing fear, confusion, and ultimately public disinterest. Eventually, we must all take responsibility for our health and our own best interests. We have talked to hundreds of people with many different ailments they *claim* were *healed* by taking CS. Fortunately, you can create your own home-brewed colloidal silver without spending a great deal of time, effort, or money.

It may be that our whole concept of *Western* allopathic medicine is changing. With tremendous resistance, scientific medicine is being dragged into the new millennium with the weight of new ideas, with the thought of merging with alternative medicine. A considerable number of internationally known medical and non-medical scientists have become engaged with the prospect of coalescing the two realms. Is this where two worlds collide?

It is hoped that the inquiring mind may find considerable interest in our book, *The Wonders of Colloidal Silver*. We trust you will find it concise, informative, interesting, thought-provoking, and easy to use. It explores the

history of colloidal silver, its medical and political aspects, side effects, theories, key characteristics, and treatment. Many medicinal therapies are impossible to practice without the aid of a skillful professional. Using *Colloidal Silver Therapy*, however, does not require any special skill or great knowledge. It is as simple as drinking water. One is able to buy or prepare excellent formulas and self dispense as needed. If you follow the directions for using colloidal silver, you may experience great results, but there is, of course, *no guarantee*.

This book was prompted by requests. It is with the sincere desire to help those who are in need of another form of therapeutic treatment that this book has been written. The authors wish to express their appreciation to all those who have lent encouragement to the work.

The great experiment which mankind has attempted upon itself, called medicine, is not as yet ended, and indeed as all earthly things will never be brought to a perfect end, because it is an experiment which deals with the most intricate secret of nature, life.

~Linn J. Boyd

Enjoy your adventure!

Dhyana L. Coburn
and Patrick D. Dignan
Baywood Park, California, February 1997

A NOTE from Patrick D. Dignan: There are many doctors that I admire, such as Dr. Bob Beck; however, there is one doctor that I cannot pardon. He is a well-known cancer physician. My brother, John C. Dignan died of cancer about five years ago. Before he died, I talked with his doctor one evening on the phone:

“Your brother is very emotional,” he said.

“Why do you say that, Doctor?”

“He’s always crying,” was his indifferent reply.

“He’s dying of cancer, Doctor, what do you want him to do?” I asked him, and then started crying myself.

“Oh, you’re emotional, too,” was his chilly, apathetic response.

“Yeah, Doc, I’m emotional, too – and I’ll never forget your cold, callous, *unmerciful*, arrogant, cavalier attitude.”

Now you know why this book is important to me. This is why I got involved in alternative medicine. Perhaps I should *thank* that doctor!
~P.D.D.

1995 ACKNOWLEDGMENTS

Thanks go to my husband, Kevin, and my children, Khara, Khristian, L’Aura, Joshua, & Jordan without whose love, patience and understanding this book would never have been completed in this millennium. I’d also like to thank my father, Patrick Dignan, for his great knowledge, research, for inspiring me to work on this book, and for encouraging me along the way... we had a good time.

D.C., 1995

I’d like to thank anyone who buys this book!

P.D.D., 1995

DEDICATION

To All Seeking Health & Vitality

And To My Father, Patrick D. Dignan
July 16, 1921 – November 11, 1997

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With heart felt gratitude, I would like to give long over-due acknowledgment to the following highly respected researchers whose knowledge, expertise, and generosity paved the way for me. A special thank you to Marshall Dudley of Silver Lightning,² who has been very helpful, generous, and a guardian angel, giving me peace of mind. Much appreciation and gratitude to Mike Devour, host of the Silver List,³ Ivan Anderson,⁴ Brooks Bradley, “Ole Bob” Baker, James Osbourne Holmes, Bob Lee, Katarina Wittich, Frank Key, Ode Coyote, Bill Sardi, David Ripley, and, of course, Bob Beck. Thanks to the wonderful Dr. Johnnie Ham for endorsing this book, and for writing an impressive foreword. I am forever grateful.

D.C., 2011

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DISCLAIMER

The information in this booklet is not intended as medical advice. It is presented strictly for educational and informational purposes only. The authors and publisher do not prescribe any of the materials, techniques, or concepts presented in this book as a form of treatment for any illness or medical condition, nor is it the intent of the authors and the publisher to diagnose or prescribe. Colloidal silver is classified by the U.S. Food And Drug Administration as a pre-1938 drug and as such, use of the sol should be in keeping with the FDA ruling. The authors and publisher make no claims whatsoever as to any specific benefits of colloidal silver. The intent is to offer health-related information to assist you in working with any health specialist of your choice. Before beginning any practice related to health, it is highly recommended to consult a health professional. Use common sense and discretion when trying any treatment. Of course, it is your right to prescribe for yourself if you feel the need to do so. However, the authors and publisher do not assume any responsibility whatsoever under any conditions or circumstances.

CHAPTER 1

HOPE IN A BOTTLE

He who has health, has hope; and he who has hope has everything.

~Arabian Proverb

NATURE'S ANTIBIOTIC

The colloidal silver discussed in this book is called **EIS** – Electrolytically isolated silver. It is a combination of colloidal and ionic silver. It is pure silver suspended in distilled water by an electrical charge. For convenience sake, we simply call it colloidal silver, not to confuse or trick anyone, just to simplify it. It is NOT silver salts /silver chloride, it is not a chemical compound/ not silver nitrate. It IS a safe, non-toxic, non-accumulative, bio-available, anti-inflammatory, non-carcinogenic, all natural antibiotic that will not cause Argyria. It is a liquid brew of micro clusters of silver particles suspended in distilled water. Silver is a powerful, old-fashioned, classic medicine; a natural, universal prophylactic and antibiotic, disinfectant and broad-spectrum antimicrobial agent that kills bacteria, viruses, molds, fungi, and parasites. The FDA states it kills over 650 disease-causing pathogens or organisms. Colloidal silver is a relatively tasteless, odorless liquid considered harmless for internal and external use. A daily dose of CS improves the immune system resulting in more energy, vitality, quicker healing, and a reduction of bodily toxins.

One should, of course, always check with their physician before taking any form of medicinal. CS is non-stinging to eyes (even baby's eyes), non-addicting, non-accumulative, and virtually non-toxic to animate life. It is known to have very few minor side-effects, and the body does not develop a tolerance, as it can to prescription drugs.

Colloidal silver is an oxidization catalyst and kills invading anaerobic pathogens in two ways 1.) by dissolving an enzyme that metabolizes oxygen of primitive organisms. This process is an electrochemical reaction. The cell can't "breathe," then suffocates and dies. 2.) Colloidal bioelectric

minerals carry a positive charge. Therefore, CS inhibits germ growth as the positive charge on the colloidal silver clusters binds up with the negative charge of the pathogen. It also allows the silver to bind with the cells DNA and deactivate it, causing an interruption of the biological function of the organism, which then cannot reproduce.

KEY CHARACTERISTICS

- Safe
- Non-Toxic
- Antibiotic
- Anti-inflammatory
- Germicide
- Disinfectant
- Non-accumulative
- Non-irritant
- Non-stinging
- Non-addicting
- Non-invasive
- Bio-available
- Natural Prophylactic
- Internal Application
- External Application
- Kills Over 650 Pathogens
- Kills Bacteria & Virus
- Kills Fungus & Mold
- Kills Parasites
- Kills Mutations

- Soothing
- Tasteless/ Odorless
- Used Medically Worldwide
- Purifies Water
- No Free Radicals
- Injectable
- Promotes Cell Growth
- No Drug Interaction
- Minor to No Side Effects
- Economical

SILVER DEFICIENCY

Besides being a *precious metal*, silver is a TRACE MINERAL, essential to the body. Trace amounts of silver are prophylactic, or protective, in nature and help strengthen the immune system. As the body ages, the ability to assimilate silver decreases. This leads to a silver deficiency and an impaired immune system. A suppressed immune system can lead to diseases, such as colds, flu, and worse, cancer. Robert O. Becker, M.D.,^{[1](#)} father of electromedical and cellular regeneration technology, was a preeminent figure in bioelectromagnetics. According to Dr. Becker, also co-author of *The Body Electric*^{[5](#)} with Gary Selden, silver deficiency is responsible for the improper functioning of the immune system. He noticed a correlation, or *link*, between low silver levels and sickness. Because our soils are depleted by use of chemical fertilizers, silver is practically non-existent as a trace mineral in our foods. If the body acquires a silver deficiency, the immune system may become impaired. Colloidal silver is the only safe way to obtain silver as a supplement. It is *bio-available* to allow direct permeability into the body's tissues. Minerals, especially trace minerals, are more important for the body than vitamins, because without minerals, vitamins cannot be utilized. Research has shown a direct correlation between mineral and vitamin deficiencies and illnesses.

Chelated minerals are a popular choice, but they only allow 40-60% absorption, whereas colloidal minerals⁶ have 98-100% absorption. Until recently, the AMA (American Medical Association) scorned the idea of vitamin-deficiency diseases. The AMA still has a long way to go in acceptance of alternative healing methods. At one time the FDA *did* approve colloidal silver as a natural antibiotic.⁷ Naturally, common sense tells us it is always best to seek the less intrusive method of healing before moving to the more toxic medicinals.

So unless an illness or infection appears to be life threatening, try the least invasive treatment first. If you are over fifty, you may remember the ouch of iodine on your cuts and abrasions. Then we switched to Mercuriochrome because it didn't sting. It was made with mercury, bromine, and merthiolate, if you can imagine. Iodine? Ouch! Sometimes the treatment is worse than the illness. Colloidal silver doesn't hurt.

SILVER LUSTER OF GLOBAL POTENTIAL

Colloidal silver is being used worldwide. As Dr. Becker⁸ states, "Of course, the germ-killing action of silver has been known for some time, the Soviets use silver ions to sterilize recycled water aboard their space stations. It kills even antibiotic-resistant strains, and also works on fungus infections." NASA also chose a silver water filter system aboard the space shuttles. More than half the world's airlines use silver water filters. The Japanese are really on the forefront of the CS explosion. Japanese firms use silver to purify air, converting carbon monoxide to harmless carbon dioxide. They also use CS, replacing toxic chlorine for scrupulously washing foods, such as raw chicken. Chlorine has many dangerous side effects, yet is widely accepted and used everywhere.

It's nice to see alternatives are now being considered and used. Also in Japan, silver thread is sewn into some clothing to protect from the sun's ultra-violet rays. In Israel, bandages of colloidal silver are used on burn victims because the CS promotes healing and regeneration. There is a city in England that uses CS to sterilize their city water. The illustrious Dr. Joseph Mercola⁹ says, "Even washing machines are now... using silver ions to kill bacteria. Meanwhile, silver-coated urinary catheters are used to help reduce urinary tract infections (UTIs) – studies showed the reduced the incidence of UTI by 47 percent – and historically, colloidal silver has been

used internally as a natural antibiotic.”⁷ A study by the University of Arizona, led by C.P. Gerba, Ph.D and K.R. Bright, Ph.D, shows ionic silver effective against the SARS virus.¹⁰ A Silver polymer which releases silver ions (Ag⁺) was found to be effective against the SARS virus: “ We tested the compound against a four-hour, eight- hour, and 24-hour exposure period and found no surviving SARS virus upon 24 hours of exposure to the polymer...” - Zhang Panhe, professor at the Chinese Academy of Military.¹¹

OUR MIGHTIEST GERM FIGHTER

The BMJ - British Medical Journal¹² (May 12, 1917) recounts that colloidal silver rapidly subdues inflammation and promotes healing. In the article, Sir Malcolm Morris reports CS is free from the drawbacks of other silver preparations¹³ and that it has a distinctly soothing effect. Because the entire genetic blueprint is carried by every cell nucleus, the potential for healing on the cellular level is enormous. According to Paul G. Aebersold, of the *Atomic Energy Commission*, “Your body may seem much the same to you as it was a year ago, plus or minus a few pounds or inches, but... in a single year 98% of the old atoms will be replaced by the new atoms which we take into our bodies from the air we breathe, the food we eat, and the water we drink.” A new body every year, and depending on the changes you make, the prospects are *incredible*. The old adage, *once a cancer cell, always a cancer cell* is no longer held as true. The possibility of healing exists in every cell. The APA – *American Paralysis Association*¹⁴ sponsors creative research into spinal re-growth, and the outlook is promising. Even brain regrowth looks hopeful. Salamanders, frogs when tadpoles, and some fish are able to regenerate the complex biological structure of the body, including the brain.¹⁵ We re-grow hair and fingernails, and children will sometimes re-grow the ends of their fingers if they are accidentally cut off.

Because colloidal silver has strong germicidal action, it has been found to be highly effective in the prevention and remedy of infections and disease, including AIDS, staph, and strep. It is suggested as a tonic for assorted illnesses, including the common cold, a topical treatment for skin ailments, a sterilizing agent for drinking water, as well as a household disinfectant. Silver has the ability to de-activate bacteria because it is a powerful catalyst for oxidation, inhibiting bacterial reproduction.

By all accounts, CS is the *safest, most powerful natural antibiotic available*. Author Jim Powell¹⁶ reported in the March 1978 issue of Science Digest¹⁷, quoting pioneering silver researcher and biochemist Dr. Harry Margraf of St. Louis, that silver is emerging as “*the best all around germ fighter we have*.” The article declares, “And now it’s silver that is finding wholly new uses as a *wonder in modern medicine*... perhaps it soon will be recognized as: Our Mightiest Germ Fighter.” ¹⁴

CHAPTER 2

CS FAQ & GLOSSARY OF TERMS

FREQUENTLY ASKED QUESTIONS

Q: *What is colloidal silver?*

A: What we are calling colloidal silver (CS – extremely small (clumps of) silver atom(s) suspended) is actually EIS – Electrolytically isolated silver. It is a combination of colloidal and ionic silver. It is pure silver suspended in distilled water by an electrical charge. For convenience sake, we simply call it colloidal silver, not to confuse or trick anyone, just to simplify it. It is NOT silver salts /silver chloride, it is not a chemical compound, not silver nitrate. It IS a safe, non-toxic, non-accumulative, bio-available, anti-inflammatory, all natural antibiotic.

Q: *What is colloidal silver or EIS used for?*

A: CS/EIS is a natural antibiotic used to treat hundreds of ailments. It is also a great remedy used to treat animals with great success.

Q: *How is CS made?*

A: With a LVDC (low-voltage-direct-current), 27 volt generator, pure 99.9+% silver rods, and distilled water.

Q: *Does it work?*

A: Yes, it works. The LVDC generator makes a 5 – 20 ppm concentration that works beautifully well to kill pathogens. Silver kills over 650¹⁸ types of one-celled organisms (germs). It usually kills them within six minutes of contact.

Q: *How Does It Work?*

A: Colloidal silver is an oxidization catalyst and kills invading anaerobic pathogens in two ways **1.)** by dissolving an enzyme that metabolizes oxygen of primitive organisms. This process is an electrochemical reaction. The cell can't breathe, then suffocates and dies. **2.)** Colloidal bioelectric minerals carry a positive charge. Therefore, CS inhibits germ growth as the

positive charge on the colloidal silver clusters binds up with the negative charge of the pathogen. It also allows the silver to bind with the cells DNA and deactivate it, causing an interruption of the biological function of the organism, which then cannot reproduce. It fizzles out. Voila, no more germs.

Q: *Have there been clinical studies?*

A: Yes. Dr. Henry Crooks, CS pioneer, concluded from his bacteriological experiments with silver, *“I know of no microbe that is not killed in laboratory experiments in six minutes.”* In 1992, Daryl Tichy developed the exclusive colloidal silver formulation that was tested by the UCLA Medical Testing Laboratory, where it, again, killed every virus on which it was tested. Studies have also been done at Brigham Young, Columbia, Halle, Harvard, Loyola, Rice, Alabama, Arizona, Syracuse, Texas, Utah, Washington, Wisconsin, UC Berkeley, UCLA, USC, and Yale universities.

Q: *What is an HVAC generator?*

A: HVAC is a High-Voltage-Alternating-Current generator. Some sols are made with a high voltage machine, from 500v to 50,000v. They are commercial units and rarely used by home brewers. There are also HVDC (High-Voltage-Direct-Current) units.

Q: *Does CS kill the good germs?*

A: Yes. Most tests show that CS kills both beneficial, as well as non-beneficial bacteria. According to researcher, Marshall Dudley, “Tests that have shown a difference have been due to inconsistent testing methods. The reason that CS does not have a significant effect on the bacteria flora in the intestines is because CS requires contact with the bacteria to kill it, and in the normal environment of the intestines, there is little or no mobility. But, if the contents are liquid, it will kill the stuff, so it appears to just be killing the bad bacteria. Also, the concept of good vs. bad bacteria is somewhat confused; E.coli is a good bacteria in the intestines, but bad if in the blood or vagina. Same goes for many others. It often depends more on where the bacteria is, than the strain.

There are two studies of note. One study in 1929, Schweizer¹⁹, verified that silver kills pathogens, including E.coli, *without harming helpful* airborne and waterborne microorganisms. In another study, former teacher of physics and chemistry, Howard Mitchell of Virginia, conducted a series of

experiments with CS. He found it has no effect on acidophilus, the “good bacteria” found in the stomach, even when using concentrations 40x higher than what might be expected to destroy other forms of bacteria. It shows that even in large dosages, the intestinal flora will flourish. In fact, there is a speculation that the silver ions may be advantageous in stimulating a vigorous growth of beneficial bacteria, helping to boost the immune system.

Q: *I heard CS can cause diarrhea, is this true?*

A: Some people experience diarrhea when they ingest too much CS. They just cut back on the amount of CS, and the lactobacilli counts return to normal within 12 hours without any intervention.

Q: *Is CS ionic?*

A: Yes, CS is a combination of ionic and colloidal.

Q: *What is a particle?*

A: A particle is an extremely small silver atom suspended in distilled water via an electrical charge.

Q: *Does CS cause the skin to turn blue? [Argyria]*

A: Not (colloidal or) ionic silver. In Argyria cases, ten were caused by MSP – Mild Silver Protein, three cases were caused by Silver Citrate, four cases by the use of Silver Salts, many cases by Silver Nitrate, one by improperly made EIS – Electrolytically Isolated Silver, and two cases due to over consumption. This is why it is so important to make a pure CS sol.^{[20](#)}

Q: *What is zeta potential?*

A: Zeta potential is the measure of the particle electric charge, or stability of a colloid. It also reveals the particle size, measuring the magnitude of the repulsion or attraction between particles. Laboratory systems (testers) are used to measure zeta potential. Check Zeta potential testers at Brookhaven Instruments Corp.^{[21](#)}

Q: *What is monatomic silver?*

A: Another name for ionic silver, or silver hydrosol.

Q: *Can I use purified water?*

A: No. Only a high quality distilled water. Not filtered, not purified, not deionized, and definitely not tap water.

Q: *Will colloidal silver help me live longer?*

A: No, there is no scientific evidence to confirm that CS will help one live longer. Your quality of life may be better, but maybe not.

Q: *What are the most popular uses for colloidal silver in the world?*

A: CS is often used to treat drug resistant diseases, such as SARS, the infamous Avian (bird) flu, and other pathogens. In Africa, CS is successfully used in hospitals to treat malaria, AIDS, cholera, flu, and MRSA. Volunteers hike into jungles all over the world to take CS to treat victims of malaria. Hospitals and hotels use CS in their water treatment. In Mexico, colloidal silver (Microdyn) is used in supermarkets to disinfect vegetables and drinking water. There are many new products on the market every year, including silver-based antimicrobial clothing and fabric.

“Former CIA microbiologist, Larry Harris, stated that silver is known to be effective against multiple disease-causing pathogenic microorganisms, including anthrax, diphtheria, influenza, whooping cough, and typhoid. In fact, it appears to be nature’s most powerful antibiotic.”²²

COLLOIDAL SILVER GLOSSARY OF TERMS

- ADA** – American Dental Association
- AMA** – American Medical Association
- APA** – American Paralysis Association
- Argyria** – A blue-gray skin discoloration cause by inferior products made with salts, poor water, or stabilizers.
- BMJ** – British Medical Journal
- CDC** – Center for Disease Control
- CS** – Colloidal Silver – A colloid is a mixture of solid atoms and a liquid. The atoms are so small and support an electrical charge, called the zeta potential, that they can stay suspended as a colloid indefinitely. With colloidal silver, the atoms of silver range from 2 atoms (.2 nm) to thousands of atoms (100 or so nm) in size.²³
- CSL** – Colloidal Science Lab
- DNA** – Deoxyribonucleic Acid; A nucleic acid that carries the genetic information in the cell and is capable of self-replication and synthesis of RNA. DNA consists of two long chains of nucleotides twisted into a double helix and joined by hydrogen bonds between the complementary bases adenine and thymine or cytosine and guanine. The sequence of nucleotides determines individual hereditary characteristics.

- EDTA** –Ethylene-Diamine-Tetraacetic-Acid, a chelating agent used for *injected chelation therapy*. It is a synthetic amino acid.
- EFT** – Emotional Freedom Technique®
- EIS** –Electrolytically Isolated Silver. This is what most people call colloidal silver, but it is a combination of both colloidal and ionic silver.
- EPA** – Environmental Protection Agency
- FDA** –Food and Drug Administration
- H2O2** –Hydrogen Peroxide, 3% grade
- HVAC** – High-Voltage-Alternating-Current
- Ion** – Ions are atoms with a positive or negative electrical charge. *Cations* are ions with a positive charge, and *anions* have a negative charge. Water by itself has no positive or negative charge.
- Ionic Silver** –A silver positively charged form of solution that is ionic and colloidal. A silver ion is an atom of silver that is missing one electron. Ionic silver is a combination of ions, and atoms, which are colloidal and suspended. Ionic silver is the best and highest bioavailable and bio-active form of silver, being 300 to 17,000 times more effective than silver salts.
- LIDC** – Low-Intensity-Direct-Current: A method for treating skin ulcers, infections and the like by electrotherapy. Therapeutic LIDC is applied to a patient by electrodes, at least one of which contains silver. The polarity of the direct current is reversed from time to time to prevent the accumulation of unwanted material upon the silver bearing electrode due to electrochemical action.
- LVDC** – Low-Voltage-Direct-Current
- MDR** – Multi-Drug Resistant
- MDR** –Minimum Daily Requirement
- MRSA**–Methicillin-resistant Staphylococcus aureus (MRSA) is a type (strain) of staph bacteria that does not respond to some antibiotics that are commonly used to treat staph infections.
- MSM** – Methyl-sulfonyl-methane, an organic compound aka DMSO2, used for healing. It reacts differently than DMSO.
- MSP** – Mild Silver Protein, a chemical process that chemically binds the silver atoms to a protein (such as gelatin) molecule.
- NDM-1** – New Disease, yet unnamed
- OTC** – Over the Counter
- Particle** –In this document a particle refers to a minute silver crystal suspended in water by mutual repulsion of a charge. Although an atom,

molecule, or ion could be called a particle, we are only using the term for silver crystals to avoid confusion.

- PDR** – Physicians’ Desk Reference

- PPM** – parts per million, for EIS this is expressed in milligrams of silver per liter or water.

- RDA** – Recommended Dietary Allowance

- RNA** — Ribonucleic Acid; A polymeric constituent present in all living cells, that plays an essential role in the synthesis of proteins, and sometimes in the transmission of genetic information.

- SOL** —Sol is short for hydrosol, which is a technical term in chemistry for a liquid colloidal dispersion.

- VAC** — Volts-Alternating-Current

CHAPTER 3

HEALING SECRETS

Be prepared to give up every preconceived notion, follow humbly wherever and to whatever abysses Nature leads, or you shall learn nothing.

~Aldous Huxley

SILVER'S CURATIVE POWERS

In MEDICINAL TREATMENT, colloidal silver has been used for the eyes, nose, throat, skin, and everything in-between. It has been proven to promote rapid healing, with less scar tissue. Colloidal silver sols have been administered *orally, topically, sublingually, vaginally, rectally, intravenously, intramuscularly*, as a *gargle*, as well as *eye and ear drops*. It can be *atomized* or inhaled into the nose or lungs, therefore, *safely used in a nebulizer, (non-thermal) vaporizer or ultrasonic humidifier²⁴ for respiratory infections*. The *fastest* way to receive the benefits of colloidal silver is to inject it, but please use caution and discretion. This method may best be administered by a medical professional. Some therapists, such as Dr. Becker, use direct application of electrically charged silver rods (his “*silver wands*”) to the skin, using the bodily fluids as the solution medium. The most widely accepted applications of colloidal silver are to *ingest it* or *apply it directly* to the skin.

AG-THERAPY

Colloidal Silver Therapy is also called *Ag-Therapy* (Ag is the atomic chemical symbol of the element Silver in the Periodic Table). The *therapeutic value* of colloidal silver, according to medical journals from around the world, is that colloidal silver is a wide-spectrum antibiotic that disables the enzyme that all one-celled pathogens (microorganisms in their reproductive stage) use for their oxygen metabolism. This causes the microorganisms and their pleomorphic or mutant forms to suffocate *in six minutes or less* upon contact. The silver ions have a enormous capacity for

oxidizing or pirating electrons from substances surrounding them. Other germicides such as chlorine and hydrogen peroxide are qualified for similar reasons, however, they may introduce side effects that colloidal silver doesn't.

Using colloidal silver dispersions, INTERNALLY or EXTERNALLY in the treatment of infections and diseases is a safe, non-toxic practice. This rejuvenating elixir allows the body to heal itself. There has never been a case of overdose, regardless of the amount ingested. It does not harm the liver, kidneys, or any organ of the body, however, silver compounds might.

The following page shows a diagram of plates of gelatin, which were exposed to the elements for a half an hour. The plate (A), on the left, was treated with colloidal silver for five minutes before the gelatin was added. Plate (B), on the right, was untreated, and shows 350 organisms – colonies of microbes. Both plates were incubated for 48 hours.

DIAGRAM OF PLATES A AND B

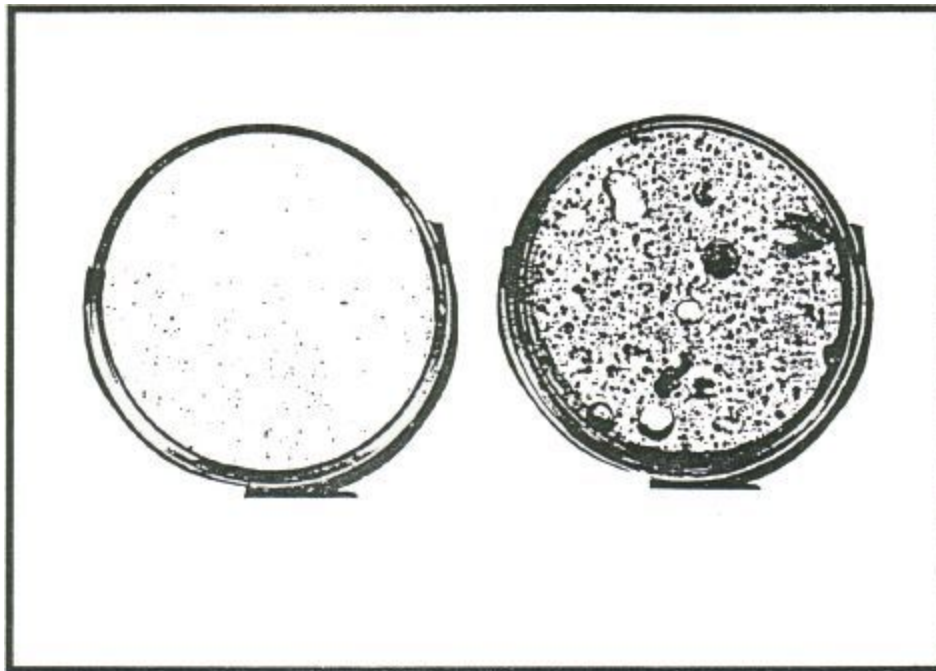


DIAGRAM OF PLATES illustrate the effects of colloidal silver on microbes.

PLATE A (LEFT) AND B (RIGHT) show nutrient gelatin exposed on a window-sill for a half an hour.

PLATE A had been covered previously with colloidal silver for five minutes.

PLATE B was untreated. It contains about 350 colonies of microbes.

Both plates were incubated for forty-eight hours at 20° C.

(Alfred B. Searle, The Use of Colloids in Health and Disease)

CLINICAL STUDIES

Accepted treatment protocol for silver is prescribed in the MERCK MANUAL,²⁵ the medical reference guide for doctors. In the manual, it addresses different forms of silver medicines, whereas *The Wonders of Colloidal Silver* is only advocating EIS. It is possible the doctors who contributed to the Merck Manual have more data and evidence of clinical studies promoting CS, but that information is not readily available.

In 1992, Daryl Tichy developed the exclusive colloidal silver formulation that was tested by the UCLA Medical Testing Laboratory, where it, again, killed every virus on which it was tested. Studies have also been done at Brigham Young, Columbia, Halle, Harvard, Loyola, Rice, Alabama, Arizona, Syracuse, Texas, Utah, Washington, Wisconsin, UC Berkeley, UCLA, USC, and Yale universities. When tests were run at UCLA they found, “The silver solutions were antibacterial for concentrations of 10 organisms per ml of *Streptococcus pyogenes*, *Staphylococcus aureus*, *Neisseria gonorrhea*, *Gardnerella Vaginalis*, *Salmonella Typhi*, and other enteric pathogens, and fungicidal for *Candida albicans*, *Candida globate*, and *M. furfur*.”

Colloidal silver pioneer, Dr. Henry Crooks, found that silver in the colloidal state is highly germicidal, quite harmless to humans and absolutely non-toxic. It is proven particularly effective in cases of intestinal troubles. Dr. Crooks concluded from his bacteriological experiments with silver, “*I know of no microbe that is not killed in laboratory experiments in six minutes.*” Researchers show colloidal silver killed every virus on which it was tested. They found it acts as a catalyst and disables the enzyme used to metabolize oxygen, causing all one-celled microorganisms to die. Because organisms can not build an immunity to colloidal silver, their mutations are just as vulnerable to its rapid action. Colloidal silver is the only silver that can be safely used as a supplement because of its *bioavailability* and slow rate of absorption.

In the December 15, 1917 issue of the British Medical Journal, J. Mark Howell suggests colloidal silver has been found beneficial in restoring the potency of the Eustachian tubes and for reducing nasopharyngeal catarrh. The BMJ claims colloidal silver has also been used to treat pyorrhea, tonsillitis, shingles, whooping-cough, septicemia, leucorrhea, and cystitis with great success.

Later, in February 16, 1918, T.H. Anderson Wells relates in Lancet, that intravenous injections of CS were used to successfully treat *puerperal septicemia* without any irritation of the kidneys nor pigmentation of the skin. At the *Upstate Medical Center*, Syracuse University, Syracuse, New York, extensive research into the curative properties of silver have been conducted for many years. Dr. Carl Anderson, of the University of Utah has done numerous tests with colloidal silver run at the university and prescribing it for his patients for a variety of reasons, including prostate problems. Laboratory tests conclude that colloidal silver is an effective antibiotic with comprehensive results.

Research conducted under the direction of Dr. Robert O. Becker, and colleague, author Dr. Joseph A. Spadaro, conclude that silver works on the full spectrum of pathogens without damage to any tissue cells. Dr. Becker states, "While analyzing hair samples and questioning the parties involved, I noticed the correlation between low silver levels and sickness. People who showed low silver levels in their hair analysis were frequently sick. They seemed to have innumerable colds, flu, fevers, and various other sickness. I believe that a silver deficiency may be the key to the improper function of the immune system." Their experiments found that silver ions, driven by only micro amperes of current, substantially promote bone growth. Using silver-ion treatment, stimulating the area with silver electrodes and low voltage electricity, they were successful in promoting rapid bone growth in cases where bone had not healed for long periods of time.

Dr. Becker claims silver not only killed microorganisms, it caused major growth stimulation of injured tissues and promoted bone *reconstruction*. They found burn patients healed more rapidly, and discovered that all **CANCER CELLS CHANGE BACK TO NORMAL CELLS**. This is amazing! Dr. Bjorn Nordstrom, of the Karolinska Institute in Sweden, has used silver for many years in his cancer cure method. Dr. Nordstrom says

the whole thing is “quite simple.” The colloidal silver brought rapid remission in patients given up by other doctors.

Dr. Becker concluded, “What we have actually done was rediscover the fact that silver killed bacteria, which had been known for centuries... when antibiotics were discovered, clinical uses for silver as an antibiotic were discarded.” They found the process is safe and free of side effects. The silver sanitizes the affected area, allowing the body to replace bone cells without any of the restraining effects of bacteria.

WHOLISTIC MEDICINE

Wholistic or *holistic* medicine is the art of treating the body as a whole unit, instead of just *parts*. The philosopher, Maimonides said *over eight hundreds years ago*, “The physician should not treat the ailment, but the patient who is suffering from it.” It sure takes a while for some ideas to sink in! Isn’t it interesting that diseases are given *names* in Greek and *remedies* in Latin? The whole body is treated as disassociated parts, and everything associated with diagnosis and treatment is shrouded in foreign words and symbols, mainly because it is an old art, but, also to veil it with mystery, keeping the lay public ignorant.

With the onslaught of pollutants in our environment, it is more difficult to remain toxin free. It becomes more and more necessary to build up the immune system and think of health as an on-going life process. Only two decades ago the American Medical Association declared it *unethical* for its members to associate with chiropractors. In 1996, the AMA passed a resolution suggesting that its 300,000 members “become better informed regarding the practices and techniques of alternative or unconventional medicine.” Many physicians still dismiss these therapies as unproved, unscientific, and potentially dangerous, scorning them as *New Age* medicine, yet there’s nothing *new* about it. And the term *junk science* is being thrown around to elicit a negative connotation toward alternative healing modalities. Dr. Marc Micozzi of Philadelphia says, “What we call *alternative* medicine is *traditional* medicine for 80 percent of the world, and what we call traditional medicine is only a few centuries old.”²⁶

Nowadays there are many different medical practices to choose from. More and more medical doctors are evolving holistically. The underlying

premise is the *prevention of disease* and in *creating wellness*. There are seven systems²⁷ of the body that require attention:

THE SEVEN BODY SYSTEMS

Immune System

Inflammatory System

Regulatory System

Detoxification System

Metabolic System

Regeneration System

Life Force (Or Spirit)

As author of *Total Wellness*, Joseph Pizzorno, N.D.²⁸ says, “Weakness in any of these seven systems results in susceptibilities that allow most common diseases to develop.”

ELIXIR OF LIFE

Silver is used in many different medical fields. It's used in Chinese medicine to fight infection, and in Ayurvedic medicine to build strength and stamina. In Anthroposophical medicine silver is used as a disinfectant, an aid to the brain, reproductive disorders in women, the circulatory system, as well as indicated in chronic suppurations, septic and fistula processes, and fevers. And in Homeopathy, silver is used for headaches, chronic hoarseness, neuralgic pain in the joints, congestion on the windpipe, brain and sinus problems, and loss of control and balance. In surgery, silver plates and silver pins are used to help mend shattered bones, bone fragments and joints. Colloidal silver is an elixir of life!

CHAPTER 4

CS USES BEFORE 1938

LIST ONE Listed in their original antiquated medical terms:^{[29](#)}

Anthrax Bacilli

Appendicitis (post-op)

Axillae & Blind Boils of the Neck

B.coli

B.coli Communis

B. Dysenteria

B. Pyocaneus

B. Tuberculosis

Bacillary Dysentery

Bladder Irritation

Blepharitis (eye lash follicles)

Boils Bromidrosis in Axille (arm pit odor)

Bromidrosis in Feet (foot odor)

Burns and Wounds of Cornea

Cerebro-spinal Meningitis

Chronic Cystitis

Chronic Eczema of Anterior Nares (nasal cavity)

Chronic Eczema of Metus of Ear

Colitis Cystitis Dacrocystitis (tear duct infection)

Dermatitis

Diarrhea Diphtheria

Dysentery

Ear Affections

Edematous enlarged Turbinates

Enlarged Prostate

Ediditymitis

Erysipelas

Eustachian Tubes

Furunculosis (skin abscess)

Gonococcus (bacteria)
Gonorrhea
Gonorrheal Conjunctivitis
Gonorrheal Ophthalmia (eyes)
Gonorrheal Prostatic Gland
Hemorrhoids
Hypopyon Ulcer
Impetigo
Infantile Disease
Infected Ulcers of Cornea
Inflammatory Rheumatism
Influenza
Interstitial Keratitis (cornea)
Intestinal Troubles
Lesion Healing
Leucorrhea (vaginal discharge)
Menier's Symptoms
Nasal Catarrh (common cold)
Nasopharyngeal Catarrh "
Suppuration in Otitis Media
(Middle Ear Infection)
Ophthalmology
Ophthalmic practices
Para-Typhoid (Nasal passages)
Paramecium
Perineal Eczema
Phlegmons
Tonsillitis (Follicular)

LIST TWO This second list³⁰ of pre-1938 documented uses of silver for the treatment of pathogens includes:

Acne Appendicitis
Arthritis Athlete's Foot
Bladder Inflammation
Blood Poisoning
Burns Cancer Canine Parvo Virus
Cholera Conjunctivitis
Cystitis Dermatitis
Diabetes Diphtheria
Dysentery
Ear "Affections"
Eczema Eustachian tubes
Eczema Fibrositis
Gastritis Gonorrheal Herpes
Impetigo Influenza Intestinal trouble
Keratitis
Leprosy
Lupus Lymphangitis
Malaria
Menier's Symptoms
Meningitis
Neurasthenia
Ophthalmology
Pleurisy
Pneumonia
Prostate
Pruritus Ani
Rheumatism
Rhinitis
Ringworm
Scarlet Fever
Seborrhea
Septicemia
Shingles
Skin Cancer

Soft Sores
Staph Infections
Strep Infections
Syphilis
Tonsillitis
Toxemia
Trachoma
Trench Foot
Tuberculosis
Ulcers
Viral Warts
Whooping cough
Yeast Infections

LIST THREE A third list³¹ of pre-1938 documented uses includes:

Acne Appendicitis (post op)

Arthritis Athlete's Foot

Bladder Irritation

Blood Poisoning

Blood Parasites

Boils Burns & Wounds of the Cornea

Candida, yeast infection

Cerebro-spinal Meningitis

Chronic Cystitis

Colds & Flu

Colitis Conjunctivitis

Dermatitis

Diarrhea Diphtheria

Dysentery

Ear Infections

Eczema Enlarged Prostate

Epididymitis

Eustachian tubes

Gastritis Gonorrhea Hemorrhoids

Impetigo

Infantile Disease

And Additional ailments: Adenovirus

Menier's Symptoms

Nasal Catarrh

Neurasthenia

Pneumonia

Pruritus Ani

Pyorrhea Alveolaris

(Rigg's Disease)

Quinsies

Rhinitis

Ringworm

Scarlet Fever

Septic Conditions of the
eyes, ears, mouth & throat

Septicemia
Shingles
Spring Catarrh
Sprue
Staphylococcus Pyogenea
Staphylococcus Pyogens Albus
Staphylococcus Pyogens Aureus
Streptococci
Tinea
Tonsillitis
Tuberculosis
Typhoid
Vincent's Angina
Warts
Whooping Cough

CHAPTER 5

DOSAGE & TREATMENT

Discovery consists in seeing what everybody else has seen and thinking what nobody has thought.

*~Albert Azent-Gyorgyi, Nobel laureate
who first isolated vitamin C from plants*

DOSAGE

The benefits obtained from colloidal silver treatment are subjective due to variable metabolic differences which tend to make the CS more or less effective. It takes less than 0.2 ppm (0.02 milligrams) of silver, and less than 7 minutes to kill non-sporulating bacteria in contaminated water. As little as one part per *billion* has been shown to be effective in some cases. When the EIS reaches the stomach, it quickly enters the blood stream. From there it is removed via the bile into the bowel, where it will be eliminated.

PARTS PER MILLION

The term *parts per million* (ppm) is a chemistry term designating a concentration of a substance (in this case, silver). It does *not* give the total number of silver particles. 3 ppm means three parts of silver for every million parts of water (by mass). If you had 100% silver, you'd have a chunk of silver sitting in a glass. There can only be so many ppm per glassful. If you make it too concentrated, the particle size will be too large and the CS unstable.

The suggested protocols for using Colloidal Ag are based on a 3 to 5 ppm up to a 15 to 30 ppm suspension. According to the Ag-Therapy Doctor's Desk Reference, by Joe J. Cardot, N.D., the recognized preparations are based on a 15 to 30 ppm formula. Most commercial sols contain 5 ppm, although some boast a highly concentrated product of 5000 ppm made with a commercial HVAC unit. Some manufacturers force the high ppm by binding the silver particles with *glyco-proteins*, which can

hinder the potency. Some feel that a formula of up to 20 ppm is best, after which it tends to be unstable. The emphasis of health is on the *prevention* of all disease and infection. The fact is, the US government has never set a Recommended Daily Allowance (RDA), however, to boost the immune system, a teaspoonful a day is suggested. “*A teaspoon a day keeps the doctor away!*” Some literature suggests that adults take one teaspoon for seven days, then 1/2 teaspoonful daily.

EPA REFERENCES

One teaspoon contains 5 ml. of liquid. 10 ppm CS contains 10 mg. of silver in one liter of liquid. One teaspoon of 10 ppm CS contains 50 micrograms of silver. EPA reference dose for 160 pound adult (average amount consumed per day in food and water): 364 micrograms per day. EPA critical dose for 160 pound adult (amount EPA says should not be exceeded in daily consumption): 1.09 milligrams per day. EPA proposed limit for silver in drinking water: 0.1 mg per liter (0.1 ppm). The average person consumes approximately 90 mcg. Of silver in their daily food. The estimated total dosage of silver required to treat serious infections, such as Lyme disease: approximately 18 to 90 milligrams of silver over the period of one month. The estimated accumulated dosage required to produce Argyria: approximately one to six grams of silver. Some references state as high as 50 grams.^{[32](#)}

ESTABLISHED DOSAGE

For *internal ailments*, the established *oral dosage* for adults is ½ - 4 teaspoons of the 3 to 5 ppm formula daily. A four ounce bottle of colloidal silver in a concentration of 3 ppm would give approximately 0.015 milligrams of silver per teaspoon. Children would take half an adult dosage, depending on body weight.

According to physicist, Dr. Bob Beck, *chronic cases* require drinking 8 to 16 ounces a day, but not for a prolonged period of time. Others say 32 ounces. The Bob Beck Protocol,^{[33](#)} one of the most powerful, alternative cancer treatments available, uses four protocols: Blood Electrification with a zapper,^{[34](#)} Pulsed Magnetic Fields with a magnetic pulser, colloidal silver, and drinking Ozonated Water.

About his protocol, Dr. Beck says, “You can do it yourself, and it is cheap. You will never have a cold again. You will never miss work again. This is the best investment that you can make in your health. It is taking back your power from the doctors and the pharmaceutical houses who have had it for generations. And we guarantee it. We have stacks of testimonials, hundreds of astounding spontaneous remissions, and we have medical records to prove it.³⁵ It will work. Not maybe. It is the most valuable information that I have ever seen. It is the best that our science can offer today in the hospitals and clinics of America.”

INTERNAL TREATMENT

ADMINISTRATION OF ORAL DOSAGE

- Nutritional Dose: 1/2 - 4 teaspoons daily, 3 - 5 ppm
- Therapeutic Dose: All doses above 4 teaspoons a day, periodically
- Gargle with mouthful for 1 minutes at a time, repeat as needed
- Sublingual: Holding a mouthful of CS for 1 minutes, repeat
- Children: 1/4 -1/2 up to 1 teaspoon daily
- Colds & Flu: 1 teaspoon every 4 hours for 3 days and gargle with CS every 2 hours
- Chronic Ailments: 2 -4 teaspoons daily or as needed
- Acute Ailments: 1 ounce– 2 ounces every hour, not long term
- Serious Cases: 2 ounces every 4 hours, not long term or 8 – 16 ounces a day³⁶, not long term
- Digestive Aid: 1/4 teaspoon with meals
- Dental: Infected Gums/Toothache: Hold CS in mouth for 1 minute, then spit out, repeat for 6 minutes. Brush teeth 2x day with CS
- Eczema/ Rash/ Acne: Spray on infected area 3x day
- Tattoos and Body Piercings: Soak a cotton ball in CS, apply as necessary
- Emphysema, Pneumonia, Anthrax: 4cc of CS daily in Nebulizer³⁷
- Lyme Disease: Treat as Serious Case, add Bob Beck Protocol³⁸ to kill the spirochetes that tend to hide in the lymph system, brain, and cartilage. Vitamin D3 is essential. Detox with parasite cleanses.
- Legionnaire’s Disease – treat air vents and heating ducts
- AIDS³⁹: Treat as Serious Case, add Bob Beck Protocol³⁴
- MRSA³²: Brooks Bradley Protocol⁴⁰ is a mixture of 75% colloidal silver (10-20 ppm), 10% pure DMSO and 15% vegetable glycerin – and spray on the infected site. Evidently works well.

Bear in mind *that it can take up to six minutes to kill some microbes.* Colloidal silver is used *orally: ingested/ gargle/ sublingually/ inhaled* for treatment of virtually anything that ails you. The CS is absorbed from the mouth into the bloodstream, then on to the body cells. CS also works well in humidifiers, nebulizers⁴¹, neti pots, making them better, more efficient, and easier to clean.

ELIMINATION / EXCRETION OF SILVER

The silver is removed by the liver, 90% eliminated in the bile, via the bowel, and very little is eliminated in the urine. Most CS is eliminated within 16 hours. If you drink too much colloidal silver, you might get diarrhea. If that happens, you'll know to simply cut back your intake.

REGARDING HIV/AIDS

Dr. Bob Beck had success in treating AIDS with his protocol. Check out Chapter 5, Dosage & Treatment in this book, and check out www.bobbeck.com for his unique procedure. In one study, Dr. Phillip Burris, PhD. of Houston University, found LIDC – Low-Intensity-Direct-Current could prevent the transmission of the HIV virus from infected to non-infected lymphocytes without damaging the lymphocytes. Other studies showed many bacteria to be quite sensitive to silver ions, with human cells being much less sensitive. He found the hepatitis A virus to be the most resistant to silver ions, the polio virus less resistant, and the rotovirus the most sensitive.⁴²

EXTERNAL TREATMENT

ADMINISTRATION OF TOPICAL CS:

Acne: Apply with spray at least 2x daily & before bed

Bug Bites: Apply daily as needed

Cuts: Apply CS 2x daily, cover with bandage

Deodorant: Spray underarms in morning

Eye Drops: 3 drops in eyes 4x daily, as needed

Nose Drops/Spray: 3 drops in each nostril, or spray, as needed

Warts: Apply CS 4x daily, cover with bandage

As a *topical* treatment, colloidal silver is absolutely *painless* on cuts, wounds, scrapes, nostrils, and eyes because it does not destroy tissue cells. Apply colloidal silver sol directly to the skin via *poultice/ swab/ atomizer/spray/ drops*. Use colloidal silver EXTERNALLY for irritations such as: *any open sore, wound, or rash*. It is also effective as a deodorant... just spray colloidal silver under your arms. You can add a teaspoonful of 3% H₂O₂ to a fresh batch of CS to use topically, not internally. Let the mixture sit for ½ hour before using.

For some ailments, such as acne, it is best to use a combination of oral and topical applications. In scarring, the ionic silver causes the DNA to dedifferentiate or revert back to stem cells. If silver ions are applied to a burn or wound, the blood cells can convert to the necessary skin, nerve and other cell types as needed. Without it, they can only form scar tissue. EIS, with its ionic content, promotes healing without scarring, which is why it is used in many burn units.

KEY TOPICAL USES FOR CS

- acne
- athlete's foot
- bad breath
- boils
- bug bites
- burns
- Chicken Pox
- cold sores/ herpes
- dandruff
- deodorant
- dermatitis
- diaper rash
- ear infections

- eczema
- eye infections
- fungus
- gargle
- itchy skin
- lesions /bed sores
- moles
- mouth sores
- Pink Eye
- poison ivy/oak
- Pruritus
- psoriasis
- rashes
- razor nicks
- ringworm
- scars
- shingles
- skin itches/ tags
- soak dentures
- sunburn
- toothaches
- warts
- yeast infection

Dr. Joseph Mercola^{[43](#)} says, “Colloidal silver has many antibacterial properties and is commonly used in hospitals to treat wounds and burns. It

has even reached the mainstream in the form of a silver bandage line from Curad.TM

According to the global skin care company, Beiersdorf (owners of Curad,TM), “Laboratory testing showed that silver reduced bacterial growth like Staph, E.coli, E.hirae and Pseudomonas aeruginosa – a powerful germ that does not respond to many antibacterials – in the dressing for 24 hours.” When silver is brought into contact with pathogens, it inhibits their growth by deactivating their oxygen metabolism enzymes, which destroys the microbe’s cell membranes, stopping the replication of its DNA.

ADDITIONAL TREATMENTS

H2O2

Colloidal Silver can be mixed with a few drops of hydrogen peroxide. The H2O2 oxidizes the CS and will free ions, increasing the ion concentration, and experiments show it changes particle size from larger to smaller. When H2O2 is added to EIS there is an immediate clearing effect, you can sometimes see the oxygen bubble off, and the Tyndall⁴⁴ will become very faint. If the ppm of the EIS is sufficiently high (25 to 30 ppm) a white cloudy precipitate may form as well.

H2O2 is normally thought of as an oxidizer, but it can act as a reducer as well. Also silver is considered a catalyst for H2O2, but in actuality gets directly involved in the reactions. The H2O2 reacts with the silver particles, producing ionic silver, a combination of silver hydroxide and silver oxide. This makes the large particles disappear, reducing the Tyndall effect. However H2O2 also reacts with the silver oxide and silver hydroxide producing a 2 atom colloid of silver plus oxygen (and water in the case of silver hydroxide).⁴⁵

The final result is a mixture of ionic silver and very small colloidal particles. The EIS will go from being medium or large particles to many more very small particles, and the particle content will increase from a typical 5-15% to around 30-50%.⁴⁶ This enhances absorption, as well as effectiveness.

Note that it is recommended to let the EIS sit for 5 or more minutes after adding the H2O2 to let it stabilize. Also some experts recommend

letting EIS *age* for 2 or more days before adding the H₂O₂, and experiments indicate a more consistent effect if this is done.

ADDING GATORADE®

One study group, as reported by scientist, Brooks Bradley,⁴⁷ found that mixing 1/3 EIS with 2/3 Gatorade enhanced the absorption of the EIS significantly. Researcher, Marshall Dudley, undertook an analysis to find why Gatorade would enhance the EIS. He found it may be due to the solubility of AgCl in water with additional chlorine ions present. He says, “Normal theory indicates that in the presence of chloride ions, the solubility of silver chloride drops. In fact it drops from about .8 ppm to about .2 ppm in the concentration of these ions in the stomach and blood.”

When you ingest EIS, it dilutes the stomach acid so that the solubility of silver chloride is reduced to below .8 ppm. When you mix EIS with Gatorade® (an electrolyte solution) it forms complexes with the chlorides so that solubility is maintained and that improves the absorption into the blood by several times. It increases the speed in which EIS is absorbed into the blood.

Marshall adds, “An alternative theory proposed by Ode Coyote is that water is absorbed slowly by the stomach since the body has to maintain the correct electrolyte balance in the blood. However Gatorade® with the proper electrolyte content is absorbed much faster since it matches the blood levels, and thus carries the colloidal portion into the blood immediately, and also allows transfer of the silver chloride at a much faster rate as well. Although both theories are completely different, fact is that the actual action is most likely due to both.”

As to the Gatorade®, another theory has been proposed by Marshall, and that is that it contains citric acid, which reacts with the silver oxide and silver hydroxide to produce silver citrate. Silver citrate is highly soluble, and is apparently stable in the stomach acid, thus allowing the ionic portion to be absorbed rapidly.

In cases of food poisoning, intestinal flu, or stomachaches, Gatorade® should NOT be used since you want the EIS to remain in the stomach as long as possible.

“If you add a small amount of H₂O₂ (1 drop to 4 to 8 oz) to the EIS and let sit for 15 minutes, then add the Gatorade and drink immediately, then

you should be able to get both effects. Do NOT add the H₂O₂ and Gatorade® at the same time, or you will end up changing all the colloidal silver to silver chloride which would NOT be good.”⁴⁸

DOUCHE

To use as a *douche*, add four tablespoons to a quart of distilled water. It is effectively used to fight yeast infections. If you do plan to use the colloidal silver mixture for yeast infections, you can mix a teaspoon of iodine to the CS. Iodine is very effective in killing yeast and the CS tends to tame the iodine.

ENEMAS

To use with *enemas, colonics or colemas*,⁴⁹ put one to four tablespoons per quart of distilled water. It is wise to use pure water when doing enemas, high enemas, or colonics. The good thing about using CS is that it will purify the water as well as provide health benefits to the colon.

INFUSION THERAPY / INTRAVENOUS

Individuals might prefer or benefit from using the colloidal silver formula *intravenously* as *infusion therapy*⁵⁰ which is said to work faster, last longer, and may work better for some people. It is highly recommended for AIDS patients. Polyps and other masses shrink when injected. Colloidal silver has the quality for injection use. Researcher, Mike Devour, says the key is getting a safe IV preparation, which besides having to be sterile and pure, must be balanced for compatibility with blood chemistry. Unless you know what you’re doing, seek a professional. Advantage Pharmaceuticals⁵¹ make IV preparations of Mild Silver Protein.⁵²

In 1986 at the National Health Federation convention in Chicago, Charlotte Gerson spoke about infusions of *hydrogen peroxide*.⁵³ She is the daughter of Max Gerson, M.D., pioneer of the raw food juice method of treating cancer patients. Ms. Gerson told about the many successfully treated cases at her clinic in Mexico and how much more successful since *injecting* a diluted form of hydrogen peroxide in the patients’ veins. She claims to have *doubled* the number of cancer remission in patients treated at her clinic.

Evidently, intravenous application does make a difference in effectiveness because it can get to the root of the problem immediately.

Apparently, it is somewhat painful to have the colloidal silver fluid injected into the muscles, so the accepted alternative is to inject it directly into the blood stream. Use extreme care, and make sure the CS sol you use is pure. The formula must be as clear as possible with absolutely no flakes in it. This is imperative. The fluid should be prepared in such a way that the blood will not reject it. *It may be best to leave this to a medical professional.* There are commercially available injectable forms of colloidal silver in 100 cc. bottles for qualified health professionals.

CAUTION: While many medicinals used in infusion therapy can be beneficial, it is important not to mix medicines into a “soup” for the veins. Mixing Hydrogen Peroxide with anything other than distilled water or an amino acid solution is dangerous and has resulted in hemorrhaging in laboratory animals. While Hydrogen Peroxide can accomplish miraculous results, it must not be mixed with any other substance, even colloidal silver, *when being injected.*

Dr. David G. Williams⁵⁴ says, “The friendly bacteria in the colon and vagina are *aerobic*. In other words, they flourish in high oxygen environments and thrive in the presence of oxygen rich H₂O₂. On the other hand, most strains of harmful bacteria (and cancer cells) are *anaerobic* and cannot survive in the presence of oxygen or H₂O₂.” Hydrogen peroxide produced within individual body cells is essential for life. The decades long dispute about the safety and efficacy of taking H₂O₂ orally or intravenously is not over. Many doctors agree hydrogen peroxide is safe and that it works. It’s also very inexpensive, so Big Pharma cannot compete with it.

Dr. Williams continues, “No one yet fully understands the complete workings of hydrogen peroxide. We do know that it is loaded with oxygen. (A pint of the food-grade 35% solution contains the equivalent of 130 pints of oxygen. A pint of 3% hydrogen peroxide found at the local drugstore contains 10 pints of oxygen. And a pint of the 6% solution used to bleach hair contains 20 pints of oxygen.) We also know that when H₂O₂ is taken into the body (orally or intravenously) the oxygen content of the blood and body tissues increases dramatically. Early researchers felt these increases were simply due to the extra oxygen molecule being released. This doesn’t however, appear to be the case.

“Only very diluted amounts of H₂O₂ are ever introduced into the body. The small amount of oxygen present couldn’t be solely responsible for the dramatic changes that take place. Dr. Charles H. Farr, M.D., PhD., a strong proponent of intravenous use, has discovered another possible answer. Dr. Farr has shown that hydrogen peroxide stimulates enzyme systems throughout the body. This triggers an increase in the metabolic rate, causes small arteries to dilate and increase blood flow, enhances the body’s distribution and consumption of oxygen and raises body temperature (*Proceedings of the International Conference on Bio-Oxidative Medicine* 1989, 1990, 1991).”⁵⁵

HOUSEHOLD HELP

KITCHEN

- kitchen sponges
- counters
- inside refrigerator
- dishwasher
- trash can

BATHROOM

- toilet
- toothbrushes
- counters
- shower mats
- bath tub
- shower

OTHER

- air ducts
- swimming pools
- heater vents
- Jacuzzis
- laundry
- window sills

Colloidal silver can be sprayed on surfaces to kill germs such as E.coli, B.coli, and Salmonella, which can cause food poisoning, gastrointestinal inflammation, or septicemia. Colloidal silver can be added to cleaning and mopping water to disinfect, *sterilize*, and stop odors. It also stops mildew, mold, and rot. CS is also good to have on hand in the Emergency Kit, Camping Kit, in the car, in the medicine cabinet, in the barn, garage, on the boat, or in the Gym bag, etc.

PLANTS & ANIMALS IN SILVER HALO

TREATMENT FOR ANIMALS

What a great gift colloidal silver is to the animal kingdom! So many animals' lives have been saved because of its healing properties! Many testimonials have been shared and documented about the benefits people have found using colloidal silver for their beloved pets. Eye infections, cuts, abscesses, stomach ailments, skin rashes, the list goes on and on. CS has been used to successfully treat cats, dogs, pigs, horses, birds, and every kind of pet. Because CS is simply added to the pet's drinking water, it is very easy to administer. Animals seem to love it. You can't really overdose with the silver solution, so it takes the worry out of prescribing. The usual dose would be a teaspoon per average bowl of drinking water. It is suggested adding CS to your pet's drinking water daily, adjust depending on the size of the pet. Obviously, horses would receive a bigger dose, ie: one to two cups. An eyedropper can be used to administer CS directly to your pet, more or less depending on the animal's size. Use the formula topically for any skin problems your pet has, and to heal infections in the eyes, ears, and mouth. Use CS in an IV for serious cases.

Horses are also very responsive to colloidal silver treatments. Colloidal silver has been a godsend to the equine world! It is very successfully used to treat greasy heel infections, Seedy Toe, EPM – Equine Protozoa Myeloencephalitis, West Nile Virus, cancer, thrush, hoof diseases, wounds, etc.. What a great, safe, and inexpensive antibiotic for animals!

It can heal fish diseases, ie: Ick, fungus, parasites. But, caution should be used with fish. The sick fish should be removed from the tank to a small treatment bowl, then returned to the main tank. Otherwise, the CS could cause an imbalance in the tank, making the water toxic.

A spray of CS can be sprayed on pet bedding as well as on your pet. It was given via injection to a family dog who was suffering from canine parvo virus. After several days on colloidal silver, the dog recovered. It is GREAT for gum infections! It is easy to think of ways this liquid sol can change your pet's life for the better.

Ruminants have a complex digestive system with four stomachs. This includes cattle, goats, sheep, deer, and elk. Pseudo ruminants include camels and llamas. Ruminants should not ingest colloidal silver, because it can interfere with their intricate digestive process. They can, however, have CS via injection, or topically, of course. CS is also very helpful for the dental care of all animals, including ruminants.

TREATMENT FOR PLANTS

Gardeners have started using colloidal silver on their plants. Good results have been seen with herbs and vegetables, as well as flowers. Some report larger, more attractive veggies. It is used on common plant problems with a high rate of success.

Colloidal silver will treat all viral, bacterial, and fungal attacks on *plants*. Use a spray bottle to mist a diluted colloidal silver formula directly onto the foliage of the plant(s). You can also add the solution to the soil to kill spores, fungi, molds, and unwanted microorganisms, using one tablespoon per quart of water. You might try a mixture of the colloidal silver and Willard Water,⁵⁶ or colloidal silver and H₂O₂ –Hydrogen Peroxide (3% solution). Plants are sensitive and respond well to treatment.

Use Colloidal silver to grow impressive *vegetables* in your garden. They will retain more nutrients and will last longer when stored. Your garden will be very happy, as will your body.

Put *cut flowers* into a vase of water along with a tablespoonful of CS. They will last longer and look better. In fact, according to author Mark Metcalf, if you place *wilted* flowers in a strong sol of water and colloidal silver, the flowers will be revived and come back to life. CS can also benefit *cut Christmas trees* by putting an ounce into each quart of tree water. It also helps to add a teaspoon of powdered iron supplement and a 1/4 cup sugar to the tree water. Add an ounce or two of CS to a quart of water for a *live Christmas tree* to help preserve its freshness. It works!

TREATMENT OF WATER & AIR

Colloidal silver is used in air ducts, air conditioners, humidifiers, swimming pools, Jacuzzis, and water filters. Water can be purified by adding one half teaspoon colloidal silver per gallon. Shake well, wait six to ten minutes, shake again, wait another six to ten minutes, and it's ready to drink. It is a good, safe product to have *in your home emergency preparedness kit in case of emergencies* such as earthquake or other disaster.

The Soviets use silver as a *germicide to sterilize recycled* water aboard their space stations to guard *against water-borne* diseases *such as* dysentery. In fact, for the same reason, after testing 23 different methods of purifying water, NASA *chose* a silver water filter system aboard the space shuttle. More than half the world's airlines use silver water filters. This includes Air France, Alitalia, British Airways, Canadian Pacific Airlines, Japan Airlines, KLM, Lufthansa, Olympic, Pan Am, Scandinavian Airlineissair. Silver air filters are used to purify air, counteracting air-borne toxins and poisons. Japanese firms are at the forefront with technologies that use carbon dioxide with silver compounds. One gas chemical company eliminates all the 200 ppm of nitric oxide by passing the gas through its silver composites. NASA also used silver to coat 24171 quartz tiles used on the Magellan spacecraft on its four year scientific mission that gave scientists a closer look at Venus. This silver protective shield allowed the sophisticated electronics to flawlessly map the surface of the planet, as well as its gravity fields, with unprecedented detail. Silver is used in the Space Shuttle engine because of its unique properties. The Air Force C17 transport and the Apache helicopter use a new silver-lithium-aluminum alloy, which is the strongest wrought aluminum alloy known. Future Space Shuttle programs will be using this amazing new material.

Research and Development Magazine reported that among the 100 most technologically significant products of 1993 was a swimming pool disinfectant containing colloidal silver, which is far superior to chlorine or bromine for killing germs⁵⁷ and it doesn't sting the eyes.

APPLIED KINESIOLOGY

One way to determine the correct dose for an individual is to use *applied kinesiology* (muscle testing). Applied Kinesiology will help determine the optimum dose per individual, for one may require more or less colloidal silver than another. The premise of *Applied Kinesiology* or *muscle testing* is that the muscles of the body are attuned to the needs of the body, thereby making the body a diagnostic tool. Kinesiology is “the study of the principles of mechanics and anatomy in relation to human movement.”⁵⁸ By testing the muscles using *muscle against muscle* you can ascertain the correct dosage to take. There are several ways to achieve this.

FINGER STRENGTH

One of the methods is to use your own two hands. To use applied kinesiology thus, place the thumb and middle finger together on one hand (usually the *right* hand for right-handed people, *left* hand for left-handed people – whatever is comfortable) making a loop. Hold firmly. Next, take your left hand (or opposite hand) and put the thumb and index finger through the loop and make a second, inter-locking loop. As the right hand resists, try to break the right hand loop with the left hand. It should hold firmly.

At this point, you should place a sample of colloidal silver on your body and muscle test again. If you want, mentally ask yourself what dosage would be the optimum for your condition. For instance: “Is one teaspoon a day the correct dose for me?” If your right-handed loop holds firm, it means “YES” – that particular dose would strengthen your body. If the right-handed loop *breaks*, it means “NO” – that dosage is too high, too little, or would weaken your body. Keep asking until you get the right dosage set.

ASSISTED / USING ARM STRENGTH

Another technique is to have another person assist you and act as resistance to your muscles. Hold the bottle of colloidal silver in your left hand, holding your right arm straight out from your body, parallel to the ground or slightly elevated. Your assistant will push down on your *wrist*, below the closed fist of your right arm, toward your hip. If the arm remains firm, it means “yes” or *good*. If the arm is easily pushed downward, this means “no” or *not good*.

This can also be done while lying down on a table with your arm vertically upright. Your assistant will try to push your arm upward above

your head. If it hold firm...the same implications apply. The *legs* can also be used for muscle testing. This is a very easy technique that is gaining in popularity. It can be used to determine the correct food to eat, the right vitamins, or any question pertaining to the health of the body. Perhaps it seems a bit strange, but it works very well. It's rather like dowsing. It works. For further investigation, pick up Dr. Broeringmeyer's book, *Energy Therapy*.[59](#)

CHAPTER 6

SIDE EFFECTS

Some people try to achieve immortality through their offspring or their works. I prefer to achieve immortality by not dying.

~Woody Allen

ADVERSE REACTIONS

There has been some concern about the side-effects of taking colloidal silver. Some claim there are none. What we have found is that the side-effects that may occur are very minor. Allergic reaction is, of course, not going to affect most folks. A “healing crisis” is not a side-effect per se, but goes along with the territory of healing. There are only five side-effects that are noted:

- A.) Allergic Reaction / Skin Irritation**
- B.) Diarrhea / Stomach distress / Headache**
- C.) Healing Crisis/ Herx Reaction**
- D.) Argyria - Blue-Gray Skin Discoloration**
- E.) Facial Tics / Seizures / Kidneys**

ALLERGY/ SKIN IRRITATION

If you are *allergic* to silver, you might not be aware of it. Naturally, if you are allergic to silver, do *not* use colloidal silver. If your skin reacts to

silver when you wear silver jewelry, such as breaking out in a rash, you might be allergic to the sterling silver, which contains copper and sometimes, nickel. You might not be allergic to silver. It is unusual for people to have an allergic reaction to trace minerals, especially when in the colloidal state, however, if there is the slightest doubt, don't take the chance. You can check with your physician if you have any hesitancy or questions. There are some people who think they have an allergy to silver because of a past history with *silver nitrate* that went awry. *Silver nitrate is a poison*. It is *not* colloidal. It has a very different modality. It can burn the skin, sting the eyes, and cause skin rashes. And it can *kill* you. For more information about silver nitrate, see the section below on Argyria.

The most likely reaction to a silver allergy is a rash, but can also be a typical allergic reaction, ie: anaphylaxis, shock, difficulty breathing, itching, swelling. This is very rare. If you take colloidal silver and get a rash and/or itchy, stop taking it immediately. It is not the end of the world, but it is annoying. For any other reactions, obviously, see your doctor immediately.

DIARRHEA/ STOMACH/ HEADACHE

Although you cannot actually *overdose* with colloidal silver, if you ingest too much of the sol, the CS can kill off the good bacteria. This is not a serious problem, however it *can* cause *diarrhea or stomach distress*. Should this be the case, simply lower the dosage you've been taking. You will want to replace the good bacteria in your intestinal tract by taking some type of *probiotic*, such as *Lactobacillus Acidophilus*. It must be live culture. There are many acidophilus products on the market. Check your health food store.

If you get your acidophilus from yogurt, make sure the yogurt says "live culture" on the label. Continental® brand makes a delicious yogurt product, but there are others. Nature's Life® sells a great *liquid acidophilus* product that claims to contain *one billion organisms per serving*. That will get your system back into order. For headache, stop using CS and try again later.

HEALING CRISIS / HERX REACTION

You may go through what is known as a "healing crisis" also known as *The Jarisch-Herxheimer Reaction*⁶⁰ (or just *Herx reaction*), a type of *de-tox* manifesting *flu-like symptoms*. Some bacteria contain toxins. Because they

are inside, they are called endotoxins. When the bacteria dies, and the cell wall ruptures, the toxins are released, which is called the Herxheimer reaction. This detoxing is not really considered a *side-effect*. The ill feeling is a natural reaction to the body's attempt to rid itself of poisons and pathogens. Elimination of toxins via the body's five channels (ie: skin, liver, lungs, kidneys, bowel) may be temporarily overloaded. You may experience this reaction with fever, nausea, headache, dizziness, aching muscles, or fatigue. If this happens, simply reduce the dosage or stop taking colloidal silver all together, and remember to drink lots of water. If you are under the care of a doctor or therapist, it may be their recommendation you go through this healing crisis without cutting back the dosage. It's a *good* thing, not a *bad* thing. But it *is* an uncomfortable thing to go through. The remarkable intelligence present in the body cells manifests in the masterful wisdom to recognize the need for cleaning out toxins and wastes. We are wise to pay attention and support the purification process.

ARGYRIA – BLUE-GRAY SKIN

Also called *Cosmetic Argyria*. What is *argyria*? Unless you live under a rock, you have read or heard a lot about this condition of silver toxicity.^{[61](#)} One of the reasons Colloidal silver production fell out of favor years ago was due *silver compounds* causing a grayish blue discoloration of the skin. It can also be deposited in other organs, fingernails, connective tissue, blood vessels, kidneys, thyroid, bone marrow, pancreas, liver, spleen, testes, and ovaries. It affects a small minority, and can show up *two to twenty-five years after exposure*.

“*Argyria* is a condition resulting from the build-up of silver in the tissues of the body, and cosmetic argyria is a bronzing, bluing or graying of the skin, predominantly caused by silver deposited into the layers of skin. Cosmetic argyria can occur anywhere on the body, but it is a condition most commonly observed on the face and in the fingernails. While this is a condition with no actual health consequence, it can easily be avoided with proper education,” states Silver Medicine website.^{[62](#)} *Argyria*, is caused by prolonged exposure to inferior silver medicinals. Silver nitrate is a compound of silver and *nitric acid*. Colloidal silver made with tap water (or any inferior water), salt, protein, or chemicals can cause silver nitrate. When the water quality is substandard, the CS will be inferior, in fact, can be toxic. If one uses tap water, which has been fluoridated, it will make a

toxic brew called *silver fluoride*. (Fluoride⁶³ is one of the most toxic substances known, and yet it is deliberately added to our drinking water.)⁶⁴ These inferior silver concoctions create particles that are too large, with no electrical charge, and are, therefore, inert. They may cause the skin to turn an unhealthy looking blue-gray color by being deposited in the skin and tissues.

This silver accumulation will not happen with the EIS colloidal silver IF it is processed CORRECTLY via electrolysis, pure distilled water, and pure silver, AND IF it is not over consumed. The silver has an electrical charge, has extremely small particles, and is not inert. *NEVER drink gray water!*

If you are in your fifties or older, a very weak solution (1%) of silver nitrate was probably put into your eyes a few minutes after you were born. It was used to kill a bacteria thereby preventing blindness from gonorrhea, in newborns. It would stain the skin around the eyes of a newborn. The silver nitrate utilized to treat infant eyes was successful in thwarting the bacteria, but it was irritating and did sting the eyes. The small amount of silver nitrate used for this purpose *did not* cause Argyria.

Usually it was the silver craftsmen and those who cleaned silver who developed Argyria. Sometimes patients who receive inferior silver medicinal treatment over a prolonged period of time develop Argyria. “Argyria was also the result of *overdose* when *hundreds of times* the proper amount of silver compounds are injected or taken orally.”⁶⁵ The percentage of patients who develop the disorder was (and is) small.

The controversy continues as a few people in the past decade have gotten Argyria. The most prominent being Paul Karason, of Madera, California, who’s skin turned blue (Argyria) after ingesting large amounts of home-made colloidal silver made with tap water. Stan Jones also was in the news because of Argyria. According to Marshall Dudley, “Stan Jones is a prime example of this happening, he was making a witches brew of silver compounds by not using distilled water.”⁶⁶ Rosemary Jacobs also developed Argyria from using silver *nitrate*, not colloidal silver, although the media stepped in to crucify colloidal silver.

Regarding Paul Karason’s skin discoloration, the celebrated health doctor, Dr. Joseph Mercola says, it “is an important reminder that even natural treatments can carry side effects, and taking large amounts of any

supplement, even a natural one, has the potential to throw your body out of balance. Dr. Mercola cautions patients to, “avoid counterfeit, sub-par, or contaminated versions,” and encourages patients use colloidal silver under the care of a knowledgeable natural health clinician.

Argyria can also cause emotional stress. Dr. Mercola suggests having good tools to cope properly with stress. Emotional Freedom Technique® (EFT)⁶⁷ has proven to be an extremely effective stressrelief technique for many patients.⁶⁸

CAN ARGYRIA BE CURED?

Yes, there is hope. There are two cases where complete cures have been documented. One case was handled by Dr. Grace Ziem, M.D., P.H.⁶⁹ at John Hopkins Hospital. Dr. Ziem used steam sauna therapy, and the patient literally sweated silver. The patient also took a lot of supplements. The cure took a long time, but the patient’s skin returned to normal. See a suggested protocol below.

The second case involves a patient who consumed 32 ounces of silver *chloride* a day for two and a half years to help cure a late stage case of neurosyphilis. The patient succeeded in curing his lethal condition, but acquired argyria in the process. The patient, “actually had spirochetes in the eyes; the only thing that remains is slight scar tissue, and the individual, who was losing the use of the eyes, can see perfectly fine. [He] was near liver failure, and within three months of initial silver use, was all but completely restored to full health. Fevers spiking 3-5 times daily, a chronic and severe lung infection, inflammation of the liver, shut down of the body’s elimination systems, loss of reduction of cognitive ability, extreme and disabling fatigue are among the symptoms that fell to the power of this... silver *chloride*.”⁷⁰

The Formula to Heal Argyria

3 Vitamin E 1000 mg. 100% Natural d-alpha Tocopheryl (note that this can be a dangerous amount of Vitamin E)

1 Selenium 100mcg yeast free

2 vegetarian Vitamin C 1000 mg

1 teaspoon MSM organic

1 super potency Vitamin B 100,

1 teaspoon of Kelp powder:

Taken every morning with 2 16 oz glasses of water, with close to a total of 3/4 of a gallon drinking water a day.⁷¹

Sauna's are highly recommended. Clay Baths and *Balneotherapy* (Salt Baths) – Epsom and Sea Salt,⁷² Sea Salt bath with a cup of Pine Oil, salt plus Miracle II),⁷³ are also suggested. Drink at least 8 ounces of water a day. Chelation therapy was once proposed, but it has been found to be of no help for argyria. Instead, look into clathration. “Chelation therapy may be described as a one-dimensional process. In contrast, oral clathration is a three-dimensional process. Specifically-sequenced glycoproteins and peptides form a lattice or inclusion complex and multiple receptor sites attach to a toxic molecule with irreversible bonds, literally wrapping around the toxic substance to prevent additional reactions with tissues or organs as it is eliminated from the body. Unlike the ionic bond utilized to transport metals from the body with chelation therapy, oral clathration therapy utilizes ionic, covalent and hydrogen bonds. Not one but three major types of bonds at multiple points are created.”⁷⁴ To avoid Argyria in the first place, use a good distilled water when making your CS, pure silver, and no additives, especially not salt.

FACIAL TICS / SEIZURES / KIDNEYS

Another temporary side-effect that has been reported *anonymously* when one consumes a high dosage of colloidal silver is that *facial tics* may occur. This *may or may not* have anything to do with the use of colloidal silver. At this point, we don't know. This is just a caution, to let you know it is possible. This was not considered a major problem by the person reporting the symptom, but was annoying. Again, cut back the dosage. On a more serious note, Seizures and kidney problems have been reported, but there is no confirmation that the root cause was due to CS, but it is definitely something to be aware of.

Sometimes a solution of colloidal silver *will sting the eyes*. If this is the case, it is not the silver causing the problem. Make sure that the solution you're using has a pH balance of 7.0 which is *neutral*. If the pH is 6.5 it should be fine, being only slightly acidic, any less than 6.5 it means that the solution is too *acidic*. Acid burns and *may* sting the eyes. Saline solution is

always neutral. A pH above 7.5 is too alkaline or basic. Don't let any of this scare you off of colloidal silver. It's really very easy to resolve. If stinging is a problem, dilute the solution with 50% distilled water. That should solve the problem in most cases.

A NOTE ABOUT CHELATION THERAPY

Chelation therapy is a relatively safe, non-toxic, non-surgical method of drawing heavy metals such as mercury, lead, cadmium, strontium, and most divalent⁷⁵ metals, as well as calcium from the body. It may not help with argyria, but has merit. It must not be abused, or it will leach valuable minerals out of the body. Chelation involves injecting or ingesting chelating agents, particularly amino acids, which bind with and draw the heavy metals out of the body via the kidneys. It also helps increase circulation because it rids the body of calcified plaque, which is why it has been used to treat arteriosclerosis for more than seventy-five years. Chelation Therapy is a vital treatment for anyone with serious circulation difficulties, cardiovascular disease, and myocardial infarction (heart attack). It has recently become a popular procedure to rid the body of mercury poisoning caused from amalgam fillings or contaminated fish.

Oral chelation therapy is a nutritional method to detoxify the body.⁷⁶ It also replaces essential nutrients that may be inactivated by low level, chronic exposure to mercury or other heavy metals. The amino acids *L-cysteine* and *L-methionine* have what is called *sulfhydryl groups*. These tend to latch on to toxic minerals such as lead or mercury. Cysteine has a specific affinity for mercury and will bind with it and carry it out of the body, assisted with vitamin C at a ration of 3:1. CAUTION: To avoid bladder or kidney stones, vitamin C MUST be taken with cysteine. The recommended dosage for cystein and methionine is 500 mg. each, twice daily for a short period of time.

If you choose chelation therapy, the following supplements are recommended: cilantro with garlic mix, alfalfa, iron, kelp, selenium, zinc and Vitamins C and E. Additional chelating agents include: *alfalfa* (detoxifies liver, alkalizes the body), *Coenzyme Q10* (improves circulation, lowers blood pressure), *garlic* (detoxifier), *Rutin/apple pectin* (binds with unwanted toxic metals & carries them out via the intestinal tract), *Selenium* (free radical scavenger), *Vitamin A* (helps excrete toxic substances), *Vitamin*

B complex (especially B5 - pantothenic acid, B3 -Niacin, and B6 - pyridoxine: protects from harmful substances), *Vitamin C* plus *bioflavonoids* (immunostimulants), and *Vitamin E* (Removes toxic substances, destroys free radicals). Along with a calcium/magnesium chelate with potassium, chromium, copper chelate, iron, and fiber these chelating agents can also be taken to prevent many degenerative diseases. As for the *injected chelation therapy*, used for over 60 years, the chelating agent used is EDTA (ethylene diamine tetraacetic acid) which is a synthetic amino acid. Usually EDTA is administered to treat high blood pressure and heart disease because it successfully improves blood circulation by removing hardened calcified plaque from the arterial walls. According to James F. Balch, M.D. and Phyllis A. Balch, C.N.C., in their remarkable book, *Prescription for Nutritional Healing*, “Most serious illnesses require intravenous chelation therapy in which repeated injections are necessary. When used under the care of a chelating physician, this safe procedure offers an alternative to vascular surgery; a coronary by-pass operation can be avoided in some cases.”

CHAPTER 7

APOTHECARY

Because practice shall not develop from speculative theories, but theories shall develop from practice.

~Paracelsus

DIRECTIONS FOR MAKING YOUR SILVER BREW

SUPPLIES TO MAKE COLLOIDAL SILVER

- ✓ Glass Jar - To Hold 8 Oz.
- ✓ Distilled Water
- ✓ Generator
- ✓ Pure 99.9+% Silver Rods, 14 Gauge

Once you have the generator in hand *with the pure silver rods attached* to the alligator clips, it is time to make your first batch.

Assemble all of the supplies: Generator, Glass Jar, Distilled Water.

1. First, heat the distilled water in a stainless steel, glass, or ceramic pan. Tea kettles are apt to have calcified residue on the inside, so don't use one to heat the water. Do not use the microwave.
2. Fill the glass jar with eight ounces of the heated distilled water.
3. Put the silver electrodes into the water, making sure they don't touch. Keep the electrodes a uniform distance apart, anywhere between 3/8" to 2"

distance, and keep the silver wires as straight as possible.

4. Stir the water with a glass or plastic stir stick while it is brewing.

Just a steady speed, not too fast. The stirring is to reduce the agglomeration of silver ions, making a higher quality product. The field strength between the wires is considerably stronger than the repulsion of like polarity ions.

5. Keep the silver rods in the water for about 5 to 60 minutes, just long enough before it starts to change color. Sometimes, it may take up to 100 minutes. (Yes, this will take some experimenting). You want a clear liquid, or a pale yellow sol. Nothing dark, nothing gray, nothing cloudy. Clear is best.

6. When you stop brewing, filter it before it settles. Any residue flakes that fall from an electrode can then be eliminated. The CS particles are too small to be held back by the filter, so only large *flakes* of residue from the electrodes will be caught in the sieve.

6. *Optional:* Then add a few drops of H₂O₂ (hydrogen peroxide), which will help make the CS clearer and the particle size smaller, and let set for a half an hour.

7. Keep colloidal silver away from electrical appliances and strong magnets. The magnetic fields created by electrical components will interfere with the charged silver particles and disturb the stability of their suspension.

Nothing should happen immediately when you put the silver rods into the water; if your CS generator has a light, the light should *not* glow at this point. This may seem strange, but distilled water does not conduct electricity. After a few moments, however, when a small amount of silver is generated into the water, the light will glow, and then, it is just a matter of time.

DO NOT USE SALT!

You can add a few drops of colloidal silver into the water to “seed” it; to help conduct electricity and help hurry the process, but not salt. The use of saline solution was once indicated because it does help conduct electricity and speed up the electrolysis process, but that is dated information. Saline usage is obsolete because it produces sodium and contains chloride, which

is a definite toxic risk. Any amount of sodium chloride produces insoluble *silver chloride* which can cause Argyria in some people, if taken for a prolonged period of time.

BREWING TIME

As a GENERAL RULE, using hot water, a concentration of 1 ppm can be made in one minute in eight ounces of water, 2 ppm in two minutes, 3 ppm in three minutes, and so on. Experiment with it. If it takes 15 minutes to get 4 ppm, and it does that batch after batch, doubling the time would double the ppm. The process is much slower with cold water. It usually will take less than an hour. If the liquid turns pale yellow, it is time to stop. Next time stop before it turns yellow. Time it.

One recipe is to space the electrodes 2½” apart, use 27 volts, have 3½” wetted length of 14 gauge silver wire in 14 ounces of distilled water. That should make a 12 ppm CS in 100 minutes.^{[77](#)}

The brewing time is variable and could take an hour or more to make the CS. Other variables, such as the distance between the silver electrodes, as well as the length and diameter of the rods, can change the data slightly. While it is conducting electricity, check the rods periodically and wipe off any residue. If your water is pure, there should be little to no residue on the rods.

In this case, a higher concentration of silver is not necessarily better. In their book *Colloidal Silver, The Antibiotic Alternative*, Lloyd Michael Canty and Zane Baranowski, say, “In fact the reverse is true, that *less is better*. In essence less is more, functionally speaking. The highest quality colloidal silver consists of the maximum number of particles of the minimum possible size with the ultimate solution consisting of a huge number of particles of one atom, each carrying an electrical charge.”

A slight mist, *ion cloud*, may envelop the *positive electrode*, while bubbles of hydrogen rise from the other, or *negative polarity*, silver rod. DO NOT LET THE SILVER ELECTRODES TOUCH EACH OTHER because the process will *stop*, and could cause the generator to short out.

CONGRATULATIONS! The eight ounces of water have now become colloidal silver. It should contain between 5 - 10 ppm of colloidal silver. Remove the silver electrodes from the alligator clips and store the generator

for future use. Place the colloidal silver liquid into a tinted jar or bottle and store in a dark, cool place. Use often!

DIRECTIONS RECAP

- 1 ☺ Heat the distilled water, let it cool a while.
- 2 ♠ Fill glass jar with 8 oz. of heated distilled water.
- 3 ✦ Put silver electrodes into jar of water, 3/8"—2" apart.
- 4 ☹ Wait while the silver & electricity work their magic.

COLLOIDAL SILVER CONCENTRATIONS

One *teaspoon* of 3 ppm contains about 15 micrograms of colloidal silver (1,000 micrograms = 1 milligram). Even if one were to orally consume several ounces of this concentration on a daily basis for several years, it would *not* be toxic, as long as it is pure. It requires less than 0.2 ppm (0.02 milligrams) of silver to kill non-sporulating bacteria. Some literature states that the MDR (Minimum Daily Requirement) of silver is 0.05 milligrams, and some that say the MDR is 400 milligrams. However, no RDA (Recommended Daily Allowance) for silver in the American diet has ever been set by the U.S. Government.

Because high quality CS has the maximum number of particles of the minimum size, it's important to make a pure solution with distilled water. You can only have so many parts per million before the electrically charged particles, which normally repel one another—remaining dispersed—start looking for *dancing partners*. Thus, they will cling to increasingly larger metal particles and gravity will force them to fall out of suspension. Solutions, which are poorly produced and have silver particles that are either too large or are inert, result in this fallout. Some highly concentrated, inferior forms of CS tend to be darker in color because the light passing through the suspension is absorbed by the coarse particles.

Coarse particles tend to settle to the bottom of the solution in a rather brown or blackish sludge. This is not healthy. Do not drink or use a dark solution on your body, but you can use it on plants. According to research done at the Runcorn Health Laboratory in England by N.R. Thompson, author of *Comprehensive Inorganic Chemistry*, the concentration of silver

necessary to sterilize water contaminated with pathogenic bacteria is between 40-200 *gamma*, or .04 to .2 ppm (parts per million), (1 ppm = 1000 *gamma*).

Therefore, a safe, effectively sufficient concentration level of the silver would be 3 to 5 ppm, as most home brewed CS products are. A four ounce solution of 3 ppm will contain approximately .355 mg. of colloidal silver. A *high* potency of colloidal silver can be made in a 500 ppm sol, which is a very potent, concentrated form, and used only in special circumstances by some therapists.

HIGH CONCENTRATION SUSPENSION

If you want to make a strong sol, heat the water before connecting the electrodes. Don't heat the water to the boiling point (212°F), but anywhere between 212°F and just above room temperature (72°F) is fine. For every ten degrees rise in temperature above 72°F, the parts per million figure doubles, however, the particles will be a bit larger, so cooler water is suggested. Use a glass, stainless steel or ceramic pot to heat the water, do NOT use aluminum. The best way to heat the water is on the stove. Refrain from using a microwave oven, but it's optional. To check the temperature of the water, use a cooking thermometer. They start at about 120°F. Keep the rods in the water for five to ten minutes, or so. Experiment. If the water starts to turn a pale yellow, stop the process, it is done. This brew will taste slightly bitter, and a little metallic.

Remember to *stir the water* with a glass or plastic stir stick while it is brewing. Just a constant, steady speed. The stirring is to reduce the agglomeration of silver ions, making a higher quality product. The field strength between the wires is considerably stronger than the repulsion of like polarity ions. Stirring can be done mechanically with a 1 ½ volt motor and a C or D battery, with a box to hold it. The stir stick is a 2" piece of plastic insulation from a #14 solid copper wire. Check Radio Shack® for the supplies.

HIGHER GRADE SOLS

To produce an even *higher grade sol*, you must *slow down the colloidal process*. When the electrolysis is slowed down, the colloidal silver particles produced are even finer. In this case, heat the water, then allow it to cool

before inserting the electrodes. When you are making the CS, the bulb may not light up because the electrical current level is too low to light the bulb. It may look as if nothing is happening, but as long as the batteries are okay, you can tell the machine is working by the discoloration on the electrodes, and by the bubbles that appear within a minute on the silver electrode. Just be patient. One benefit is that you'll be able to taste the difference. It shouldn't be bitter, but it will taste slightly metallic. Even though this is a slower process, it only takes five minutes to make 1 ppm in eight ounces of distilled water, or 4 ppm in 20 minutes.

You want to make sure that the product you use is not adulterated with any chemicals, additives, stabilizers, binders, or preservatives. If a product says it requires refrigeration, it probably obtains another ingredient that might spoil if left at room temperature.

CHAPTER 8

QUALITY LIQUID

The natural healing force within each one of us is the greatest force in getting well.

~Hippocrates

QUALITY OF SILVER

A pure form of colloidal silver is made by placing “99.999% fine” *pure silver rods* into *pure distilled water* that does NOT contain saline solution. There are different *grades* of silver. Use pure silver @ 99.999% *fine*, which is very soft; 99.99% and 99.9% are also acceptable. *Sterling* silver is a combination of silver, copper, and sometimes nickel. It is usually about .925 to .950 silver, with the remaining percentage being copper, which has its own healing benefits,¹ and nickel, which is *toxic*.⁷⁸

☠ CAUTION: NEVER USE STERLING SILVER to make colloidal silver! Silver coins (pre-1964) are around .850 to .900 fineness, definitely not pure enough to use for CS healing benefits. It is important to keep the silver rods clean so the sol will be clean. If you see the formula turn a gray hue, throw it out and remove the electrodes and wash them. Simply wipe the silver off with a very fine sandpaper (crocus cloth). *To avoid contamination, do not wash the silver with soap or any other chemical.* It's important to keep the silver as pure as possible.

SILVER SUPPLIERS

Gold wire, 22 gauge, 24k

Silver wire, 14 gauge 99.9%, 99.99% fine silver, or 99.999%

Silver suppliers can be found on the internet. You can try:

Rio Grande, 7500 Bluewater Road NW Albuquerque, NM 87121-1962

Phone: US: 800/545-6566; Canada: 1-800/253-9738; All other countries: 1-

505/839-3011 www.riogrande.com

Hauser-Miller, 10950 Lin-Valle Drive, St. Louis, MO 63123 Phone: 314/487-1311 www.hauserandmiller.com

Some people complain, saying jewelry grade is not pure, however, if you order 99.999% silver, jewelry supplier or no, you will get pure silver, not sterling silver, not silver with other metals, but, pure silver. It is a ridiculous argument. Even with 99.9% silver (if you do the math) you can make a 10 ppm CS, and if the remaining 1% were arsenic (it will most likely be copper), it would still not exceed EPA guidelines for daily intake. Obviously, the finer the silver the better, and the most expensive. As of December 2, 2011, 99.999% silver runs \$39.63 per oz., equaling 4.65 ft. of wire, which would give you enough silver wire to last for years, and some to share. Bear in mind, prices change on a daily basis.

SILVER COMPOUNDS

If poor silver quality, poor water quality, salt, protein, or chemicals are added to the process, the result will be a silver compound. Researcher Marshall Dudley states, “A silver compound will, typically, become *silver chloride* as soon as it hits the stomach.” He explains that the silver chloride reaches the bloodstream, where it circulates until exposed to sunlight via the skin and is photo reduced to silver atoms. A photographic process occurs, as with film. The remaining silver chloride will start reducing onto those particles, some of which will get deposited in the skin. The particles will appear blue or black, giving the skin a bluish hue. This is called Argyria. To avoid this, use high quality distilled water, pure silver, and no salts.

WATER QUALITY

If the silver rods you use to make the colloidal formula turn black and scaly, it generally means your water is not pure enough. It is essential to use a good, high quality distilled water. ☠ NEVER USE TAP WATER! Sometimes the distilled water has been sitting on the shelf too long, or isn't really distilled. Distilled water can still have chlorine and carbon dioxide in it because they turn into gas during the distilling process. Try heating the water to just before boiling (boiling temperature is 110° C / 212°F). Then allow the water to sit until it cools and the gases disperse. If that doesn't work, buy better water, or make your own.

If there are flakes in the silver water, *strain the batch* using two coffee filters. The colloidal particles are so small that they readily will pass through the filter paper and if your CS is prepared correctly you should see no residue left in the filter paper.

COLOR QUALITY

Some literature says that a critical indicator of the *quality* of colloidal silver is its color. This is not entirely true. The silver sols range in color, but the **ONLY** recommended color is CLEAR or PALE YELLOW. A clear yellow or golden yellow color like that of apple cider is touted as indicating the highest quality colloidal silver, however, we maintain that a *clear solution is the best quality*. This is because as the size of the microclusters get larger, the color of the formula turns darker. If a commercially prepared solution is *clear*, one might think it to be nothing but water, whereas if the color is yellow, it indicates that *something* is in the solution. But it could be yellow food coloring! There *are* charlatans out there. Nevertheless, the light colored sols are considered **superior**, whereas the dark colored CS are determined to be **inferior**. And if the water you make is GRAY, throw it out! Do NOT drink gray, brown, or red water, it is inferior and toxic if ingested. It means either your distilled water is not pure enough, or your silver is not pure enough.

According to author Mark Metcalf, “Yellow colloidal silver is favored by most manufacturers, not because it is more effective than other types, but because it has a longer shelf life.” The yellow colored sol may have a slightly bitter or metallic taste. One way to form a yellow sol is to place a glass of CS in direct sunlight. The sunlight will cause loss of charge on the particles of some CS preparations, and, thus, cause aggregation of the particles, forming larger particles that will no longer appear clear, but will absorb blue light, giving the CS a yellow color. This is not from oxidation, since exposure to light tends to cause silver compounds to reduce, not oxidize. We are not advocating putting the CS in the sun, just use this as an experiment. It is a good way to check that you have actually made colloidal silver, although it doesn’t always work. Perhaps it’s not necessary to go into the theory of color, but it should be remembered that the color of the sol will be influenced by the color of the light used to view it. It will also be influenced by the trace elements in the distilled water, which can turn the liquid any number of colors. Color-Bashers are ever ready to attack.

Manufacturers insist they are in a *frequency race* not a “color competition.” According to Dr. Henry Crooks, it is FRESHNESS and DENSITY (parts per million), *not* color, that determines the effectiveness of the sol.⁷⁹ Others claim it is surface area that is most important. Most people, though, just want it to work. If they can make a good quality, inexpensive CS that works, that’s all they want. ‘nough said!

MAINTAINING QUALITY STORAGE

If you manufacture your own colloidal silver, you will no doubt create a long lasting clear to golden sol⁸⁰ liquid. Once you have the sol in hand, store the precious liquid in an air-tight *glass container* at room temperature, in a DARK CUPBOARD. DO NOT STORE IN THE REFRIGERATOR. Do not let it freeze. If the CS gets too cold, it may start to fall out of suspension, creating an inferior product. A quality brew should last up to one year with no loss of potency, nevertheless it’s recommended that a product be kept only three to four months. Although, in theory, a sol should stay in suspension longer, *fresh is best*. Don’t just let the liquid elixir sit on the shelf! *Use it*. Make fresh batches to have on hand.

As mentioned earlier, sunlight, cold temperature, magnetic fields, and time can cause the silver to fall out of suspension. Because CS is photosensitive, light can destroy the potency of the batch. Sunlight will photo reduce a liquid in ten minutes to 3 hours. The longer it takes, the better quality of the CS. With indoor, artificial lighting, this would take about three days. Because of its photosensitivity, CS is best stored in *tinted* or *opaque* glass jars or bottles. We recommend *dark brown/amber glass* bottles. Hydrogen peroxide *amber glass bottles* from the pharmacy work well, as do beer bottles. Some juice bottles are tinted and make good containers. Although indigo is prettier, it is not recommend because they don’t block the uv (ultraviolet) rays, whereas the brown bottles will. According to researcher, Marshall Dudley, “the only colors that affect CS are ultraviolet, violet, and blue.” Do not use plastic containers, unless they are made of *nonreactive* plastic, such as the brown hydrogen peroxide *plastic* bottles, because there is a structural electrical charge in the hydro-carbon molecule of plastic containers which may draw the silver out of suspension, binding it to the walls of the container. CS in plastic containers should be a short-term affair. For long term storage, use glass.

ADDITIVES & STABILIZERS

Additives are not recommended. *Salt* is not recommended. It is used to make the colloidal silver more *isotonic*, which means it enables the sol to mix with the blood with less bruising, which is only important if it is intended *for infusion (injection) therapy*. Otherwise, salt will react with the silver, plate out, and create *silver chloride*, a very toxic substance. Yes, salt will help conduct the electricity, but it can cause toxicity, and it won't prolong the shelf life of the CS. The only disadvantage to not using an element to conduct electricity is that it will take longer to make the CS batch, but it will be a better quality liquid. This is where hot water comes in handy – hot water helps conduct electricity and causes no side effects.

To remedy the problem of plating out, some companies add an artificial stabilizer, such as a glyco-proteins, gelatin, Aloe Vera gel, starch, or a chemical element like EDTA (which encloses the element in a chemical cage). Addition of a protein, such as gelatin, is a preference some people have, believing this will extend the life of the CS. Knox® gelatin is used for homemade formulas by adding one envelope of gelatin to a gallon of water. But the gelatin tends to lessen or entirely block the potency of the solution. It creates *silver protein*, which is not suggested for consumption, and it is prone to mold and fungus, unless used immediately. Because it is so easy and economical to make a batch of colloidal silver, there really is no need to add the gelatin. Fresh is best. Additives tend to bind the silver molecule, preventing it from forming large clusters. This keeps the silver particles suspended in the liquid and increases the sol's viscosity (thickness) and extends the life of the product. These are then listed on the label as a “natural excipient.”⁸¹ *The trouble with the use of stabilizers* is that the beneficial effects of the silver tend to be *lessened* or *blocked*. Daryl Tichy, purportedly one of the researchers responsible for this revival in colloidal silver, states, “Most of the commercially available (colloidal silver) products compromise the pure colloidal solution by the addition of a gelatin, albumin, or synthetic polymer in an effort to bind the silver particles and retard settling. Colloids stabilized with either a protein or polymer will produce a pyrogenic (fever) reaction in the body. Colloids without these foreign substances have no observable pyrogenic effect.”

CHAPTER 9

WONDER DRUGS & SUPER BUGS

The golden rule is to test everything in the light of reason and experience, no matter from whom it comes.

~Mohandas Mahatma Gandhi

MIRACULOUS WONDER DRUGS

A 2011 report by the CDC says that deaths due to prescription painkiller has *tripled* over the last decade. CDC Director, Dr. Thomas Frieden states, “Overdoses now exceed the number of heroin and cocaine overdose deaths combined.” The director of National Drug Control Policy, *drug czar*, Gil Kerlikowske, and Dr. Frieden are working together to raise awareness about prescription drug abuse. 1 in 20 people over the age of 12 has misused prescription painkillers.⁸² The number one cause of ER deaths is due to overdose of acetaminophen, an OTC pain med.⁸³ According to the New England Journal of Medicine, there is *a lifetime maximum dosage* of all pain medicine combined. That is 1 per day for a year, or 1000 tablets in a *lifetime*. Abusive usage will increase chances of kidney failure by double within 20 years. If one were to exceed 5000 tablets, it will increase those chances by 800 percent.

Why use colloidal silver when antibiotics are available? First, silver was *discovered*, antibiotics were *invented*.⁸⁴ Unlike antibiotics, colloidal silver is a *safe, non-toxic, non-accumulative* substance that has very few, mild side effects. It kills pathogens *and their mutations* - something antibiotics can *not* do. There are many different kinds of pharmaceutical antibiotics, each with their own “special” properties. On average, each one can, independently, kill *up to* six different disease causing organisms; whereas colloidal silver kills *over* 650 different pathogens.

It wasn’t that long ago that prescription drugs were considered miraculous wonder drugs, yet, as Robert S. Mendelsohn, M.D.⁸⁵ relates in his book, *Confessions of a Medical Heretic*, “While the fascination with the

miracle [of antibiotics] remains, these drugs that were once extremely valuable are now extremely dangerous.” Unfortunately, medical science is still under the delusional theory and *practice* that it takes a *poison* to *kill* disease, therefore sees little, if any, virtue in natural medicines. You might notice that every drug advertised on TV cures the symptom but not the disease; they also indicate the drugs cause a dozen horrific side-effects.

Big Pharma is Big Business. In March, 2011, the FDA’s *Center for Biologics Evaluation and Research* approved a new drug called “Yervoy.” According to Life Extension Magazine,⁸⁶ this drug adds “just four months of the least productive, lowest quality, and most expensive life.” It has horrible side effects AND costs \$120,000 for four doses at \$30,000 per dose! We have gotten so good at masking the pain and symptoms of disease that we’re deluded into thinking we are well. We need to get to the *root* of disease. Colloidal silver kills the *cause* - it doesn’t cover it up. It does this without harming the body.

Andrew Weil, M.D., author of *Natural Health, Natural Medicine*, says “There is a growing sense that regular medicine gives drugs too readily, is too expensive and too dangerous.” Mendelsohn reported that “Many doctors prescribe penicillin for conditions as harmless as the common cold. Since penicillin works exclusively against *bacterial* infections, it’s useless against *virial* conditions such as colds and flu. Penicillin and other antibiotics do not shorten the course of the disease, do not prevent complications, and do not reduce the number of pathogenic organisms in the nose and throat. They do no good at all. What they *can* do is cause reactions ranging from skin rash, vomiting, and diarrhea to fever and anaphylactic shock.”

Perhaps this seems a bit harsh. Antibiotics *have* done *tremendous* good, which is why they were called “wonder drugs,” but they *don’t* work on viruses. In retrospect, it’s not entirely a hollow victory. The problem with antibiotics, aside from the numerous side effects, accumulation factor, and limited usefulness, is that they also tend to *suppress* the symptoms, thereby creating future problems. And it’s not altogether fair to fault the physician exclusively, because sometimes it’s difficult to know what to do for patients. Another dilemma is that the patients themselves often *request* and even *demand* antibiotics. They’re inclined to *share* antibiotics with friends and family. The *antibiotics kill off the good bacteria along with the bad*, thereby creating a breeding ground for microorganisms, having no

competition - no good bacteria with which to battle, thus compromising immune systems.

SUPERBUGS

Most prescription drugs carry side effects which make their use risky. They should be used with the utmost caution and in critical situations only. Another *major* problem, aside from the side effects, is the progression of *superinfections* and SUPERBUGS. *Super* or *smart* germs are microorganisms that have mutated, producing new strains that are resistant to antibiotics. Dr. Mendelsohn continues, “When an antibiotic fights one infection, it may encourage an even worse infection by a strain of bacteria that is resistant to the drug. Bacteria are remarkably adaptable organisms. Subsequent generations can develop resistance to a drug as their ancestors are exposed more and more.”

As antibiotic-resistant bacteria such as MDR (*multi-drug resistant*) Pneumonia, MDR Staphylococcus, MDR Enterococcus faecium, and MDR Tuberculosis continue to spread, life becomes increasingly uncertain. Now there is NDM-1, a super-bacteria from India, and E.coli super bug in Germany, MDR: TB, Cholera, and HIV/AIDS. MDR bacteria can travel over large geographic distances, making everyone at risk. It sounds like science fiction with the advent of “Andromeda Strains.” Life imitating fiction, how frightening. Because antibiotics are losing their effectiveness, physicians fear that patients will *die* from infections that were once easily curable.

With the advance of the superbugs, the days of prescribed drug overuse are hopefully coming to an end. Activist and scholar, Dr. Robert S. Mendelsohn states, “the hospital is the Temple of the Church of Modern Medicine, and thus one of the most dangerous places on earth.”⁸⁷ He says hospitals are a breeding ground for supergerms, “where antibiotics flow like soup. Some bacteria even adapt to the point where they *feed* on the antibiotics!” Generally speaking, mortality rates *drop* whenever hospitals go on strike. Adriane Fugh-Berman, M.D. declares, “Medical malpractice alone kills an estimated 45,000 people annually (in the U.S.), making it the leading cause of accidental injury and death.”

In 2011, Director Dr. Thomas Frieden of the CDC reports, “We’re in the midst of an epidemic. Narcotics prescribed by physicians kill 40 people per

day.” According to a three year study, consumer advocate, Ralph Nader⁸⁸ contends, “300,000 Americans are *killed* each year in hospitals alone as a result of medical negligence.”⁸⁹ That is *astounding*! Researcher Mark Metcalf reports, “Using statistics from a 1984 Harvard University study, the *National Safety Council* and other sources, the Campaign to Protect Consumer Rights says that more people die in the U.S. from medical negligence than any other accidental cause. If these statistics are valid, medical errors kill more people each year than automobiles, falls, drownings, fires, choking, guns, and poisons combined.”⁹⁰

OUTBREAK

“Bad” germs are *pathogenic* or *disease-causing organisms*. *Bacteria* are one-celled organisms which are either harmless, beneficial (as in *good bacteria*), or harmful (pathogenic). It would take about 30 trillion bacteria of average size to weigh an ounce. There are different strains or “tribes” of bacteria having a diversity of shapes (spheres, rods, spirals, commas) which helps classify them.

In Latin, the word *virus* means “poison.” A virus, smaller than bacteria, is an infective agent capable of growth and reproduction only in living cells. *Viruses* are what author Andrew Scott calls “pirates of the living cell.” Dutch microbiologist, Martinus Beijernick, was credited with the discovery of viruses in 1898. He along with German scientists, Freiderich Loeffler and Paul Frosch, developed the following criteria for viruses:

- ❖ Not Microscopically Visible (except with Electron Microscopes)
- ❖ Do not reproduce unless introduced into another cell
- ❖ Not held back by filters that hold back bacteria and other known microorganisms.

Antibiotics are not used for viruses, which are known to “run their course,” but are sometimes used for *complications* of viruses. *Colloidal silver is used for the virus itself, as well as the complications involved.*

Germes are spread by contact. Some germes are airborne, such as rubeola (“hard” measles) and tuberculosis. The rubeola virus can live in the air for at least ten minutes. Most communicable pathogens are carried in the mucus of the nose. There are many more germes in mucus than in mouth saliva. With some microorganisms there are more disease germes in saliva than in the blood, as in AIDS. As you know, AIDS has spread across the world. HIV is not acknowledged to be spread via the tuberculosis vector, spread via the air. It has to be a direct, body fluid to body fluid. Not to be entirely shocking, but it is considered a *retrovirus* like the *Mycoplasma virus* that can live outside the body *for up to 21 days* and be entirely biologically active.

And what about the “Gulf War Syndrome”⁹¹ – the disease our government reluctantly acknowledges? It sounds like a tuberculosis type of vectoring. Some soldiers brought back sand from the Gulf War as a souvenir. If you have sand, don’t open it! *The microbes can stay alive for five to seven years!* And if that’s not alarming enough, strains of tuberculosis and Enterococcus bacteria have become *drug resistant*.

A new strain of cholera has emerged in Southeast Asia.

“Ebola” is the killer African virus that was popularized in the book, *The Hot Zone*, and in the film, *Outbreak*. Ebola and its sister virus, “Marburg,” are two members of a family known as *Filoviridae*, so named because they resemble a piece of thread (“filo” in Greek).

Ebola and Marburg are blood-borne and kill upward of 60% of their victims by causing massive internal hemorrhaging. There is no known cure. The frightening “Hanta” virus and the new “flesheating” bacteria are even more examples of the *germ warfare* that society is up against. By investigation it is apparent that biological warfare agents are deliberately introduced into our environment (ie:

serums injected into military personnel during the Gulf War).

According to the newsletter, *Contact - The Phoenix Project*,⁹² Vol. 9, No. 3, May 16, 1995, Colloidal Gold⁹³ “is going to prove to be a must if you wish to survive the crystalline viral assaults.

In some of the man-altered viruses, the zinc molecule which attaches the cap (head) to the viral body has been tampered and upgraded to, in some instances, *titanium*. Why? So the antibiotics of choice can't knock it out easily. When you remove the attaching programmed "head" or "cap" of the virus, the entire robot then disseminates. ...This is all tampering with DNA, RNA, and genetic structures of cells or crystalline life forms. EBOLA is one of them and it has been UPGRADED with a new 'neck'." It is *alarming* to think that humankind could be decimated by an unseen "mystery" germ that science cannot control. Colloidal silver and colloidal gold are two therapies available to give us hope.

MAGIC BULLET

Immune systems are getting weaker, unable to fight off many forms of pathogens, and not responding well to antibiotics. We in the United States have worse immune systems than some third world countries. The scope of the healing possibilities of the *magic bullet* (antibiotics) is becoming smaller, their triumph over infectious disease an *illusion*. In fact, Dr. Mitchell Cohen of the **CDC** (Centers for Disease Control and Prevention) has emphasized that "no antibiotic will be a magic bullet, for the germs will surely evolve into resistant strains again." Nobel laureate Dr. Joshua Lederberg added, "It's a race – the evolution of microbial predators vs. our wits. But it's a race that's winnable." New drugs are in the making, but old approaches won't work. Research is being done that attacks the *Achilles heel* of the bacterium which is its genetic structure. Researchers are decoding the DNA code, hoping to isolate genes and find a way to assault. New drugs are slated for public consumption on a continual basis.

In their book, *Life Extention*, Durk Pearson and Sandy Shaw wrote, "Modern medicine has practically eliminated certain diseases which were once great killers, including smallpox, polio, and plague. However, in doing so, the pattern of development of immune responses to these diseases in children has been altered from that of even a few score years ago. It is important to understand how immune responses develop and to ascertain that your child will not be unnecessarily susceptible to infectious diseases by failing to develop immunity." They recommend boosting the immune system naturally. We think because a disease is eradicated that it is no longer a threat. This is not so. True, the threat is less, but it's not eliminated

totally. Increasing the function of the immune system is an essential part of contemporary existence. A fact of life.

LEAP OF UNFAITH

Dr. Mendelsohn is severe and unyielding. He says, “To protect yourself from the pusher-priest [doctors], you again have to make the heretic’s *radical leap of unfaith*. Don’t trust your doctor. Assume that if he prescribes a drug, it’s dangerous. There is no safe drug. Eli Lilly, [of the big Lilly Pharmaceutical Company] himself once said that *a drug without toxic effects is no drug at all*. Every drug has to be approached with suspicion.”

To give doctors a little break here, it’s usually not the *doctors* who object to the use of colloidal silver. Most doctors are *truly* interested in *healing* and are open enough to inquire about colloidal silver. Encourage your doctor to do so. For negative criticism about colloidal silver, look to the *pharmaceutical cartels*, who have money issues, and, in turn, the FDA. According to the audio tape “Dead Doctors Don’t Lie,” by Dr. Joel D. Wallach,⁹⁴ doctors get monetary KICK-BACKS from the laboratories and clinics (ie: More than \$400 may be given to a doctor for each MRI). Physicians also give away free medication given to them by the pharmaceutical companies, further provoking the title *pusher* by the disenchanted.

THE RIGHT TO PRESCRIBE

Because our society has become *poly-pharmacy*, meaning taking more than one drug at a time, Dr. Mendelsohn says, “you’ve got to become aware of the dangers of *combinations* of drugs.” He suggests you arm yourself with the PDR (Physicians’ Desk Reference) book and become aware of the side effects and complications that could arise from taking drugs and drug *cocktails*. And of course, you have the *right to refuse* to take any prescribed drug. It is also your *right to prescribe* for yourself as long as the remedy is *legal*.

Albert Einstein said, “*Great spirits have always encountered violent opposition from mediocre minds*.” So we’re in good company. At this moment, colloidal silver is legal. And, there is no worry about taking colloidal silver with other medications because CS has never had a drug interaction with any other medication, although it may interfere with the

body's absorption of certain drugs, ie: penicillamine, quinolones, tetracyclines, and thyroxine. The best solution is to take the CS two hours before or after taking any medicine.

SILVER BULLET

Special prescription drugs are required for different types of bacteria. According to the CDC –Center for Disease Control, *13,300 Americans died in 1992 because of drug-resistant bacteria. That number keeps going up!* And how about the infections caused by antibiotics? Fungus and molds have a nasty habit of infiltrating the body during antibiotic use. In 1996, over 34 scientific journals around the world have published more than 200 articles on the emerging diseases. According to Linda Hawes Clever, editor of the Western Journal of Medicine,⁹⁵ this collaboration is intended to focus attention on what is perceived to be a growing global health threat. Ms. Clever says, “Ignorance is not bliss. Ignorance is fear.” In 2011 the emergence of antibiotic-resistant bacteria is a worldwide threat, and a hot topic at conventions. According to Dr. Ron Surowitz,⁹⁶ head of the *Florida Osteopathic Medical Association*, “The use of antibiotics almost always necessitates the use of colloidal silver to eradicate the fungus and yeast that will occur because the antibiotic was used.”

To gain a different perspective than the allopathic methodology, in *Secrets of the Soil*, Peter Tompkins and Christopher Bird report, “metabolism is synonymous with enzyme activity.” Findings based on the work of Dr. Rudolph Abderhalden, Director of the *Laboratory for Endocrinological and Enzymatic Diagnosis* in Basel, Switzerland, and Professor of Biochemistry at Halle University in Germany assert, “disease is a disturbance in the harmonious pattern of enzyme activity, an activity dependent on the presence of *trace elements*. Breakdown of the enzyme system results in disease or death of the cell. Many nutritionists and physicians now agree that there is really *only one disease: malnutrition*; that all the other ills derive from it.” This is important to consider. This means if one keeps properly nourished, all those frightening germs mentioned above will find they are uninvited guests, will bid you farewell, and wreak havoc elsewhere. Just how does one find proper nutrition? Start with good organic produce, grown in mineral rich soil, and supplement the diet with vitamins and minerals that are bio-available. Sounds easy. Unfortunately, our soils are depleted, our produce lacking minerals, and

most vitamins and minerals are worthless. Colloidal silver is a step in the right direction.

Now, more than at any other time, alternative health and healing methods are being sought. The wonderful thing about colloidal silver is that it assists in boosting the immune function. We all need that! It appears to control *all* microorganisms *and* their mutations. Another good thing is that no resistant strains develop and there have been few side effects noted. This is great news! Plus, there is no problem with overdose with colloidal silver. Colloidal silver is a reliable alternative to expensive drugs. It is silver magic! The Silver Bullet.

CHAPTER 10

FDA NEWS & BLUES

The true and lawful goal of the sciences is none other than this: that human life be endowed with new discoveries and powers.

~Francis Bacon
Novum Organum (1620)

FOOD AND DRUG ADMINISTRATION

Commercial colloidal silver has been around since the late 1800s. It was approved by the Food and Drug Administration (FDA) in the 1930s as a *safe antibiotic*. Before 2001, colloidal silver was considered a “pre-1938 drug” making it legal to dispense without political protocol, exempt from FDA jurisdiction under the *grandfather clause*.⁹⁷ Now, the FDA claims jurisdiction over the sale of CS, and will not allow any medical claims to be made in association with the sale of CS. As of 2011, the FDA states, “Any OTC⁹⁸ drug product containing colloidal silver ingredients or silver salts that is labeled, represented, or promoted for the treatment and/or prevention of any disease is regarded as a new drug within the meaning of section 201(p) of the Federal Food, Drug, and Cosmetic Act (the act).”⁹⁹

According to a letter from the FDA dated September 13, 1991 received from Consumer Safety Officer, Harold Davis, “These products may continue to be marketed without submitted evidence of safety and effectiveness (required of all prescription drugs marketed after 1938) as long as they are advertised and labeled for the same use as in 1938 and as long as they are manufactured in the original manner.”¹⁰⁰ The FDA has no jurisdiction regarding a pure mineral element. However, according to the FDA rules, because CS is considered to be a pre-1938 drug, it *cannot* be used for treating the HIV Virus nor any other post-1938 ailment. It *can* be used as a treatment for all the *acquired diseases* of active AIDS. There are obviously more diseases that CS will help remedy or *cure*. Richard L. Davies, the executive director of the Silver Institute,¹⁰¹ which monitors

silver technology in 37 countries, states “In four years we’ve described 87 important new medical uses for silver.”

Up until a few years ago, the FDA has allowed colloidal silver to be marketed without submitted evidence of safety and effectiveness, however, the FDA received calls about the claims made by the colloidal silver manufacturers and now requires the manufacturers to *prove their claims* of the cures. Their intention, hopefully, is to protect the public from charlatans. So far, this pre-1938 rule has really allowed a great deal of freedom, considering most ailments came along well before 1938.

Aside from AIDS, the few diseases that are *post-1938* include: Lyme Disease, Breast Cancer, Chronic Fatigue Syndrome, Reyes syndrome, and Legionnaire’s disease. But, of course, many of the *symptoms* of these diseases are dated pre-1938. And, actually, in 2010, Lyme Disease was found in the famous frozen Neolithic, 5,300 year old mummy nicknamed, “Iceman,” by his Italian doctor, Eduard Egarter Vigl.^{[102](#)} Old, but not tested pre-1938!

According to author, Peter A. Lindemann,^{[103](#)} in his article, *A Closer Look At Colloidal Silver*, “While silver has been shown to be a very effective germicide, killing gram-negative bacteria, gram-positive bacteria, yeasts, molds, and viruses in laboratory experiments, this does not mean that it will invariably cure disease conditions in the body caused by these organisms. Colloidal silver is a fantastic adjunct to the home, but it is by no means a ‘cure-all’. The biggest obstacle to using colloidal silver as a ‘home remedy’ is the lack of information in the public domain on how to use it effectively in any given situation. The FDA has tested colloidal silver extensively and found that different micro-organisms succumb to its action at a wide variety of concentrations and exposure times. If any of this information entered the public domain, the FDA would consider their own research ‘unsubstantiated medical claims’ and reason enough to classify colloidal silver as a ‘new drug’. The ‘new drug’ classification would be ‘required’ because ‘new use protocols’ had been developed that did not exist before 1938.

“Here is an example of the problem. It is now estimated that one in four women will develop breast cancer in their lifetime. I have spoken to two women who claim to have cured themselves of breast cancer with colloidal silver. They were both diagnosed by biopsy. After the diagnosis, they took 2 teaspoons of colloidal silver a day until their surgery. One took a home-

made product, the other took a silver protein product. In both cases, the biopsy of the removed breast tissue and lymph nodes was cancer free. The question is, will colloidal silver work this well for all cases of breast cancer? Probably not, but in the current legal and political environment, we may never know. No pharmaceutical company can control or monopolize ownership of colloidal silver, so none of them will ever fund the testing, which currently costs over \$10 Million and takes 10 years. FDA says if you claim that colloidal silver cures breast cancer, that would classify it as a new drug, and the public cannot be given access to new drugs without proper testing. Using the FDA model, it could cost the public \$1-billion to 'prove' to the FDA what the FDA already knows about colloidal silver. Politics has definitely entered this picture. FDA does not want to be exposed as an enforcer for the drug companies, or be seen as an agency clearly not acting in the public's best interest. While these ideas are not new to some of us, it would be a startling revelation if a large portion of the population began thinking this way. FDA would certainly like to avoid this 'public relations' embarrassment. The fact is, FDA has never spent our tax dollars discovering something important, and then published their findings for the benefit of the public at-large; especially when it involved something that was powerful, safe, and inexpensive for the public to make for themselves. Obviously, empowering the population to be self-reliant and frugal in relation to their own healthcare is not the FDA's responsibility. Colloidal silver clearly has some extraordinary capabilities and hundreds of legitimate uses. But without standardization, quality control, and extensive medical testing, the public will never know how best to use colloidal silver in a given situation. FDA may yet try to restrict public access to colloidal silver, claiming it is unsafe, even though they know how 'safe and effective' it CAN BE when used properly. In the absence of the release of this authoritative testing data, the public is left just experimenting and groping for the answers. A big fight over the public's access to colloidal silver may be looming because the cost of healthcare in this country is out of control, and the public is looking for inexpensive solutions that work. In that sense, colloidal silver could be 'just what the doctor ordered'."

The most controversial topics in the media is the condition of silver toxicity called *Argyria*, mentioned several times in this book. This media barrage was once considered an FDA scare tactic, but we think the FDA mandates were a sincere attempt to question the public safety issue. Several

people reported having Argyria, and the FDA didn't really know anything about it, so what else were they expected to do? Good thoughts and prayers should be sent to those who, unfortunately, developed Argyria. For CS enthusiasts, it could be worse, it isn't banned, and we are grateful for the guidelines and the cautions. There are a lot of charlatans out in the world, but most people are genuine and want to do what's best. Hopefully, these guidelines will keep CS in safe hands. There is more about Argyria in Chapter 6.

CHAPTER 11

HEALING WATERS

We all tend to see our bodies as ‘frozen sculptures’ –solid, fixed, material objects—when in truth they are more like rivers, constantly changing, flowing patterns of intelligence. The Greek philosopher Heraclitus declared, ‘You cannot step into the same river twice, for fresh waters are ever flowing in.’

~Deepak Chopra, M.D.

Perfect Health

FLUIDIC NATURE

Water is an amalgam of oxygen and hydrogen, H₂O. The water element of the ancient philosophers has been metamorphosed into the hydrogen of modern science, as air has become oxygen. It is said that primordial water was extracted from the air by God. The ancient philosopher, Paracelsus, believed all elements consist of a subtle, vaporous principle and a gross corporeal substance. He believed water, being two-fold in nature, consists of a dense fluid and a potential essence of a fluidic nature.

The whole body is about 70% water and water constitutes 80-90% of the human brain. Water is essential for proper maintenance of the body.

LIVING WATER

There are nine different kinds of water: hard water, raw water, boiled water, soft water, rain water, snow water, filtered water, deionized water, and distilled water. Then there is altered water: colloidal, alkaline, acidic, oxygenated, grander water, Willard’s water, hexagonal water, pentagonal water, pi water, Flanagan’s water, and so on. However, the most important aspect of healthful water is the raw state in which it is used. Using the proper water to make colloidal silver is extremely important because of the electrical and biological requirements. Not all water conducts electricity.

Distilled water doesn't conduct electricity well, but, it makes the best quality sol. Stay away from tap water, period!

Many argue that pure DISTILLED WATER is the only water that should be used for drinking. Others, like Dr. Paavo Airola, author of *How to Get Well*, say that distilled water is “dead” and leaches minerals out of the body. To this, Dr. Allen E. Banik, author of *The Choice is Clear*,¹⁰⁴ says, “Of course not! It is only inorganic minerals rejected by the cells and tissues of the body, which, if not evacuated, can cause arterial obstructions—and other problems. These are minerals that must be removed, and distilled water is able to do it.”

On the other hand, Dr. Airola declares inorganic minerals in natural waters are effectively absorbed and well utilized in metabolism. He refers to the Hunzakuts, who “for 2000 years have been drinking water so heavily mineralized with lime and other inorganic minerals that it is *milky* in appearance.” Some say “ORGANIC WATER” such as river water, spring or well water is best because it is full of organic minerals and carries a higher potential for electrical charge, and is therefore considered LIVING WATER. For the purpose of making a good quality CS, use distilled water.

STRUCTURED WATER

As Theodore Schwenk explains, water is composed of layers, and is not one solid mass of liquid. When these layers are stirred or shaken, the layers are responsive to absorbing an electromagnetic force or energy. Whenever water is agitated, it is affected by magnetic forces, which are either manmade or from the earth's natural magnetic field. This occurs in nature when water flows over rocks, an action found to cause water to be structured. This action creates a reaction allowing the molecules within it to strengthen *their positive and negative charges. By increasing their natural attraction and repulsion, they form liquid crystal chains, which cause a significant change in the composition of the water, making it quite distinct from what we consider normal water. One of the main benefits is that this now structured water becomes more like the body's own water. One benefit to structured water is more efficient and stronger colloid production. This is why it is necessary to stir the water during the colloidal process.*

When manufacturing your own CS, silver molecules will fall out of suspension when they come in contact with organic matter. This is a very

important consideration. *Distilled water*, lacking minerals, is extremely non-conductive, which is why CS is sometimes added to the water during brewing. Distilled water has minute particles of trace elements in it. It can be considered structured water.

Researcher Daryl Tichy, of Brigham Young University, and Vice President of Research and Development of his own company¹⁰⁵ says, “In our process of colloidal production, we use a structured, distilled water. Although this does not change the chemistry of the water or the colloidal sol, we can greatly increase the water’s capacity for maintaining highly charged colloids without a stabilizing additive. In addition, structured water is found next to the cellular membranes and in the cytoplasm of healthy tissue. Structured water correlates with *aerobic* metabolism and has an *alkaline pH*. Cells and tissue associated with a toxic state (cancerous, etc.) are in a *anaerobic* metabolic state. (The cytoplasm has unstructured water and an *acid pH*.)” Distilled water, then, is the best choice when making colloidal silver. No additives are suggested.

Romanian scientist, Dr. Henri Coanda, the father of fluid dynamics, discovered that the secret of long life was in the structure of water and believed “we are what we drink.” Coanda invented a “fluid amplifier,” a device that makes snow from water. In the center of each snowflake there is a circulatory system in which “living” water circulates, much like blood circulates in animals.

HYDROTHERAPY

The practice of *hydrotherapy*, the treatment of disease by the internal or external use of water, dates back thousands of years. There is an incredible variety of hydrotherapy methods to choose from, such as drinking water; taking baths, mineral baths & hot springs, hot tubs, foot baths, showers; being near waterfalls (with all those negative ions), douches, enemas, colemas, and high colonics, and so on.

There are several types of water used for healing the body, each with their own unique properties. Place the CS in the bath water, footbath, or atomizer to spray the skin. The body will absorb the nutrients and benefit from the soak. This is just a brief list to suggest that there are different options. Some hydrotherapy treatment beyond the traditional methods are as follows:

KEY HYDROTHERAPY APPLICATIONS

- Water With Colloidal Silver
- Water With Hydrogen Peroxide
- Clay Water
- Herbal Water
- Ocean Water
- Willard Water
- Solarized Water
- Crystal Water
- Positive Thoughts

WILLARD WATER

Dr. John Willard's Catalyst Altered Water is a Bio-Enhancer that increases the absorption of nutrients, works as an anti-oxidant and scavenger of free radicals, and provides a more efficient elimination of wastes and toxins. It is used to heal burns and many ailments. It is available at Health Food stores.

SOLARIZED WATER

If you want to *solarize* the CS giving it the "sun's energy," *prior to* making a batch of colloidal silver, place the distilled water into a clear or colored bottle and put jar in direct sunlight for two to six hours.

CRYSTAL WATER

Made by placing a quartz crystal in distilled water in a glass jar in sunlight. Crystal properties include light wave absorption, refraction of light, birefringence, dispersion, and polarization of light. Crystals will ionize water if left in water for 20 minutes.

POSITIVE THOUGHTS

Groundbreaking work by Dr. Masaru Emoto, author of *Messages from Water 1 and 2*^{[106](#)}, shows that thoughts and feelings can alter physical reality. His experiments with water molecules, crystallized after being subjected to concentrated thoughts and then photographed, revealed the crystals changed according to the intentions of the thoughts. The significance of Dr. Emoto's research constructs a new awareness of how we can positively influence the earth and our personal health by creating and using positive thoughts. It's not uncommon anymore to see people walking around with positive affirmations taped to their water containers. Tape affirmations on jars of distilled water to use when you make a batch of CS. See if you can feel the difference!

LIQUID CRYSTALS

Scientist and lecturer, Dr. Patrick Flanagan,^{[107](#)} has been collecting water samples from all over the U.S. and contends water may be the most important substance on the planet. Flanagan discovered water is "one of the world's most mysterious anomalous substances." Water, having "thirty-six distinct isotopes, each possessing different properties, it is the universal solvent of chemistry, capable, with time, of dissolving any and all the elements, even gold. Among its odd attributes, such as growing lighter instead of heavier as it freezes... its potential strength is ominous. Were all the extraneous gases to be removed from an inch-thick column of water, that column would become harder than steel."

Water is composed of a small number of *liquid crystals* and a large number of chaotically random molecules. Liquid water, even at boiling temperature, has microscopic *icebergs* of liquid crystals, which retain their set structure, whereas the rest of the water is all randomly oriented, vibrating vigorously. When water is cooled, more crystals are automatically created. When frozen, the whole mass becomes crystalline ice. When we drink water, our system structures the water into a composition of octagonal liquid crystals due to the *energy of colloids*. Atoms of a crystal are arranged in orderly geometrical lattices.^{[108](#)}

CHAPTER 12

ISN'T IT IONIC?

It is health which is real wealth and not pieces of gold and silver.

~ Mohandas Mahatma Gandhi

SILVER IONS

Yes, it IS ionic. Colloidal silver, or the EIS – Electrolytically isolated silver we are exploring is ionic *and* colloidal. Although it is not considered a true colloid, in the strict sense of the meaning, bottom line is, it works. It heals. The electrical conductivity of CS creates the silver ion content. All home brewed sols are ionic silver, with usually 10% silver particles. The ionic form of CS is many times more effective than silver salts or metallic silver. The Canadian government silver site^{[109](#)} reports, “silver ions are 300 times more effective than silver chloride (salts) and 15,000 times more effective than silver sulphide.” Studies by *Supfle and Werner* (1951) and L. Schioppa, *Chimie e Industrie*, (1936) provide data that demonstrates and confirms that silver ion sols work best at killing pathogens and appear superior to any other form of silver.^{[110](#)}

Why is this important? In 1939, Robert J. Hartman stated in his book, *Colloid Chemistry*, “...metallic silver in colloidal suspension... yield *silver ions* in such a quantity as to have a detrimental effect on microorganisms but slowly enough not to be irritating to the tissues. The colloidal silver particles provide a continuous source of these ions, yet the particles are *not absorbed* by the body tissue taken en masse in true solution by the body fluids; consequently, colloidal silver can be applied directly to delicate mucous membranes, such as those in the eye, with no irritation and with beneficial results... The colloidal particles diffuse gradually throughout the blood and give prolonged therapeutic action.”

According to Remington's Practice of Pharmacy, “the antiseptic action is due to the liberation... of silver ions [and] the considerable degree of antiseptic action... is not proportional to the total silver content.” Dr. Robert

Becker credits silver ions for helping the body to transform diseased tissue back to normal. Dr. Becker reports that “All organic activities and processes of growth in any living organism, or any metabolic function associated with sustaining life of any kind is an electric phenomenon and requires elements of ion exchange. *Cations* (+) carrying a positive electrical charge, and *anions* (-) having a negative potential are constituents of acids, bases, and salts, which become active as electrolytes (or conductors of electricity) in aqueous solutions. Life in its broadest sense is electrical—derived from the interplay of chemical elements. And the entire electrolyte system must be kept in constant flux, moving blood, digestive fluids, and body fluids.”¹¹¹

Now for a little basic chemistry. All matter is made up of atoms. ATOMS are considered the *basic building blocks of matter*. An atom is a tiny particle which consists of an inner region called the *nucleus* surrounded by particles called ELECTRONS. An *electron* is a *negatively charged* subatomic particle found in regions surrounding the nucleus of an atom.

A PROTON is a *positively charged* subatomic particle present in the nuclei of atoms. A MOLECULE is the unit formed by the bonding¹¹² (covalent, ionic, etc.) of two or more atoms. The slightest particle discernible in the microscope is still close to *one thousand times larger* than the largest molecule. An ION is an electrically charged atom or group of atoms.

MAVERICK MOLECULE

As the molecules in the Colloidal silver formula are diffused, in the process some atoms gain electrons, some lose electrons. As Fred Soyka explains in his book, *The Ion Effect*,¹¹³ “Each molecule has a core, or nucleus, of positively charged protons surrounded by negatively charged electrons. Nature constantly seeks an equilibrium in all things, and in this case it seeks a balance in which there are as many electrons as protons so that the positive and negative charges cancel one another out. This happens in a stable, or passive, molecule of air. But while you may not be able to see a molecule, scientists can actually weigh its component parts. Since an electron is 1,800 times lighter than a proton, it is the electron that is most easily displaced—and when that happens the equilibrium is upset and a ‘*maverick*’ molecule, or ion, is created.”

ION: from the Greek *ion*, neuter present participle of *ienai* – to go. “When an acid, base, or salt dissolves in solution, some of its molecules separate into positive and negative ions. Each molecule forms two or more ions whose electric charges neutralize each other when recombined into a molecule.

Cations are positive ions formed by the loss of electrons; *anions* are negative ions formed by the gain of electrons. *Positive* sodium ions and *negative* chloride ions attract one another and form a crystal of table salt (sodium chloride). This crystal is a collection of equal numbers of sodium ions and chloride ions, held together by the mutual attraction of positively charged particles and negatively charged particles. This sort of chemical union is called ionic valence, or electrovalence. (W.H. Slabaugh)”: Hammond /Barnhart Dictionary of Science.

IONS come in three sizes: large, medium, and small. The small ions are absorbed by living matter. “Ions within structured water are characterized by high energy hydration bonding in which the hydration shells around each of the ions has been increased. This increased electrical activity produces increased chemical/ catalytic activity,” states Daryl Tichy.

Colloidal silver is, of course, *micro clusters* of minute particles that are larger than most molecules, yet *very* small. The *key* is that these particles are *suspended*. The ions produced by the electrical process are bio-available to the body, diffused gradually via the body fluids. There is *no accumulation of silver in the body with colloidal silver* as it is produced with *electrolysis*.

THE POSITIVE SIDE OF NEGATIVITY

The number of electrons determines the polarity of the atom (some positive, some negative). The *positively charged* ions tend to attract the *negatively charged* ions. Therefore, a molecule that loses an electron becomes positively charged. If that displaced electron attaches itself to a normal molecule, that molecule becomes negatively charged. If the charge decreases (reduced by light, heat, cold, electric fields, time, etc.) the ions tend to stick together and coagulate. This transforming coagulation prompts the system to lose its colloidal action, rendering it *dead*.

What happens is the ion loses its charge and falls out of suspension. Ions of both positive and negative charges are vital to life. Their ratio (five

pos-ions to four neg-ions) seems to be as important. The electrically *positive*-charged ions of colloidal silver produce a continuous flow of catalytic activity. *The silver ions help the body regenerate tissue, while eliminating old, diseased, or cancerous cells.*

Perhaps you've heard about the remarkable healing properties of *negative*-ions. According to the work of microbiologist and experimental pathologist, Dr. Albert P. Krueger, at the University of California at Berkeley, an astonishingly small amount of *air-borne* neg-ions can kill bacteria and disease in a matter of minutes. The body absorbs ions by inhalation into the respiratory tracts and lungs, and also through absorption through the skin. That's why people feel so good when near the waves of the ocean or at a powerful waterfall. The continuous flow of water produces neg-ions.

A pioneer in the ion-science work dating back to 1924, Russian scientist, A.L. Tchijewsky, claimed the nerve endings under the skin serve as receptors for ions, having a direct influence on the body and its organs. The brilliant, avant-garde Swiss physical chemist and biophysicist, Dr. Walter Stark, maintains that the points at which the body absorbs ions are conceivably the same as acupuncture points.

FIELD OF LIFE

Two scientist in the 1920s, Elmer J. Lund of the **University of Texas**, and Harold Saxon Burr of Yale, experimented with the electrical fields of the body. Lund found the polarity of regeneration in species could be controlled or reversed by small direct currents passed through the animal's body. Burr observed electrical fields around, and electrical potentials on the surfaces of, humans, animals, plants, and even molds that respond to light, moisture, storms, sunspots, and phases of the moon. Burr and Lund advanced theories of the electrodynamic field, Burr called the "field of life" or *L-field*. They found that growing tissue is electrically negative, and that cancer is the most negative of all. Colloidal silver, having a positive charge, attracts negative cancer cells and destroys them.

BIORADIATION

In her book, *The Cure For All Diseases*, Dr. Hulda Regehr Clark,^{[114](#)} claims an energy she termed "*Bioradiation*" is broadcast from every living

creature. Dr. Clark found this energy, *chi*, or *prana* is electrically broadcast from our cells and has a measurable frequency (1,520 to 9,460 KHz is the human range) in the radio frequency (RF) range. She states everything emits a characteristic range of frequencies or bandwidths and electricity can be used to kill bacteria, viruses and parasites in seconds, (pathogens range from 77 to 900 KHz). Dr. Clark's zapper outputs approx. 5 volts DC pulsating at around 20 kHz (20,000 cycles per second) square wave.

CHAPTER 13

COLLOIDS IN MOTION

Because the mother of experience is she who gives experience—use, order, method and art without which medicine amounts to nothing.

~Paracelsus

WHAT IS A COLLOID?

A colloid is a system in which one substance (in this case, *silver*) is divided into minute particles called *colloidal particles*, and dispersed and suspended throughout a second substance (in this case, *distilled water*) without bonding to solvent molecules. Dr. Bob Beck wryly says, “The term *colloidal* means *particles* not *ions*, but producers of ionic silver products will try to convince the buyer that their product is a silver colloid.”

“Colloids, by definition, do not dissolve, and become part of a solution. In the case of mineral colloids, this is due to their unique electromagnetic charges, which bind them to each other. The body chemistry acts upon these structures, breaking them down into biologically beneficial elements. Most minerals in solution, on the other hand, are in the form of positively charged atoms (cations) which also have a positive electromagnetic charge. Their charge is the same as the bio-electrical charge of the body and thus they are more poorly absorbed due to the *like-repels-like* concept of electromagnetics.”¹¹⁵ Colloidal particles act as “*seeds of energy*” that *float* in the liquid sol despite the pull of gravity, because they are electrically charged. They consist of small aggregates of atoms called MICRO-CLUSTERS, or atomicmicro-clusters. Colloidal silver, or the EIS (Electrolytically Isolated Silver) we are exploring is ionic *and* colloidal. Although EIS is not considered a *true colloid* since it is also ionic, the CS works to kills pathogens, and after that, it’s just semantics. Bottom line is, it works!

The electrically, uniformly-charged particles gives them a *catalytic power* which causes a strong chemical action “out of all proportion with the quantity of matter brought to bear,” reports Dr. Leonard Keene Hirschberg, A.M.M.D., at John Hopkins. He alleges, only *electric colloid metals* “present the necessary homogeneity [evenly distributed], minuteness of granules, purity, and stability” for maximum therapeutic health benefits. Dr. Hirschberg states, “Speaking generally, the colloidal metals are especially remarkable for their beneficial action in infective states.”¹¹⁶

All living things exist in the colloidal form. Colloid means *particle*. It is a term first coined by English chemist, Thomas Graham, in 1862. “By colloidal, Graham meant those materials which readily crystallize and have the vital function of diffusing readily through animal membranes, as opposed to amorphous masses, which do not diffuse readily or at all through animal membranes, and cannot therefore be assimilated.”¹¹⁷ Prior to that, in 1843, researcher, Seimi, became the first to systematically investigate colloids. Michael Faraday, another notable English chemist, in 1857, produced colloidal gold. A sample of his colloidal formula can be seen in a London museum. According to the *Colloid Research Foundation*, the highest quality colloidal silver consists of the maximum number of particles of the minimum possible size with the ultimate sol having a huge number of particles of one atom, each carrying an electrical charge, with no artificial stabilizers or chemical additives of any kind. Another property of a colloid is particle *surface area*. *Particle surface area* gives the ability of the colloid to react with its environment; the larger the surface area, the better the effectiveness of the colloid. The reactivity increases as the surface area increases.

CLASSIFICATIONS & CHARACTERISTICS

According to H. Freundlich, researcher and author of *Colloid & Capillary Chemistry*, solutions are classified into *three basic CLASSIFICATIONS*:

1. true solutions 2. colloidal solutions 3. emulsions and suspensions.

THESE ARE CATAGORIZED BY:

- Identifying the Particle Size

- Determining Brownian Movement
- Whether it Would Pass Through Filter Paper
- The Level of its Solubility

The colloidal system has *three basic* CHARACTERISTICS:

- A.) Heterogeneous (must consist of dissimilar ingredients, such as silver and water.);
- B.) Multiphasic (must have more than one phase, i.e. gas/liquid, solid/liquid, etc.);
- C.) Insoluble (the particles must not dissolve in the solution or suspension.).

Colloids have *three main* GROUPS:

+lyophobic (solvent-hating), not stable and do not stay dispersed.

+lyophilic (solvent-loving), high molecular weight compounds.

+association colloids, as in soaps and detergents.

Raw juice is colloidal. Drinking fresh squeezed vegetables and fruit makes it possible to utilize considerably more nutrients than by eating the produce. As a container of raw juice sits, you'll notice that the larger particles will fall out of suspension and settle on the bottom of the bottle. To redistribute the contents, simply shake the bottle. The blood stream has many **electrolytes**, such as calcium, potassium, and sodium. These are also colloidal, carrying electrical charges. As colloidal technology progresses it will revolutionize medical science. The high tech colloidal procedures have already made remarkable results.

HOW SMALL ARE THEY?

The finest the naked eye might see is a particle that is four one-thousandths ($4/1000$) of an inch in diameter.¹¹⁸ How small are they? One teaspoonful of colloids have a total surface area of *over 127 acres* composed of *billions* of tiny electrically charged particles. You could fit about a *billion* particles into a cubic four one-hundredths ($4/100$) of an inch. These ultra-fine *Submicroscopic Clusters* are larger than most molecules, but too small to be observed through an ordinary microscope.

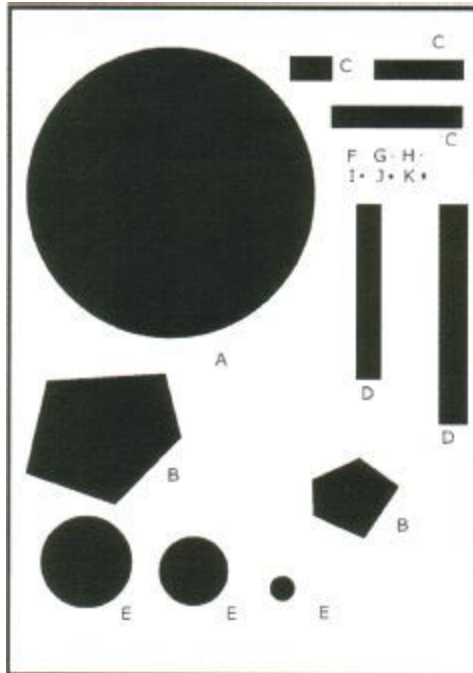
They are so small that for a particle to move one quarter inch would be equal to us going about eleven hundred miles. A particle is approximately one billionth of a meter in diameter. The particles can, of course, only be observed with an electron microscope. When suspended, the silver particles measure in the ULTRAMICROSCOPIC REGION – only a fraction of a millionth of a centimeter in diameter, or between 1nm (nanometer) and 100nm, or between .001 to .1 micron. The smaller the particle, the more effective the results of the CS liquid will be.

The OPTIMUM PARTICLE SIZE is 0.0005 to 0.015 microns. All CS with particle sizes from .2nm to 15 nm appears to be very effective. The micro sizes we are talking about is like splitting hairs, and most discussions have been primarily theoretical. One micron equals one one-millionth ($1/1,000,000$) of a meter. Silver particles carry a *positive electrical charge*, which attracts free-roving water molecules. This forms the nuclei of liquid crystals. These minute mineralized particles are self-repelling stable particles that have extraordinary motion and speed. Does colloidal silver cross the blood brain barrier? There are blogs about it, but no evidence of quantitative studies, although the thought is, why wouldn't it?

Wolfgang Pauli, German Nobel laureate in physics, concluded “colloids provide the most important known link between the inorganic and the organic, a clue to the very source of life.”¹¹⁹

In the diagram on the next page, you can see how small colloidal silver is compared to a human red blood corpuscle or a grain of rice:

DIAGRAM OF LINEAR MAGNIFICATION 1:10,000



A. Human Red Blood corpuscles (7.5μ diameter, 1.6μ thickness)

B. Fragment of rice starch granule (according to V. Hohnel) $3-8\mu$

C. Particles in a kaolin suspension

D. Anthrax Bacillus (length $4-15\mu$, width about 1μ).

E. Cocci (diameter about $0.5-1\mu$, rarely 2μ).

F.G.H. Particles of Colloidal Silver solutions (0.0006 to 0.015μ).

I.J.K. Particles from settled silver suspensions (fall out) (0.075–0.2μ).

* μ=Micron

BROWNIAN MOVEMENT

Held in *true solution*, instead of actually dissolving, the *aqueous metallic silver* particles remain suspended in the liquid. They can remain in suspension almost *indefinitely*, animated by what is called the *Brownian Movement*,^{[120](#)} a random zig-zag activity observed under the microscope. The colloidal particles have phenomenal mobility and velocity. They can move many thousands of diameters in a fraction of a second. Their stability depends on the size of the particles, the medium used and the process of manufacturing.

FALLING OUT OF SUSPENSION

The smaller the size of the particles, the more active they are and the longer they stay in suspension, the longer they hold an electrical charge. The addition of a stabilizer^{[121](#)} to the sol inhibits this energy. In addition, sunlight, cold temperature, magnetic fields, and time can cause the CS to lose its charge and fall out of suspension. This “falling out” or “plating out” shows that the electrical charge, although long lasting, is not permanent. Falling out occurs when the metallic silver particles either attach themselves to the sides of the container or settle on the bottom of the container. The problem with this is that it renders the sol less potent, inert, or worse, toxic.

COLLOIDAL MINERALS

Researcher, Dr. Patrick Flanagan, says that “Colloidal is a *condition*, not a *mineral*.” Colloidals are known as the *twilight zone of matter*.^{[122](#)} He says, “These minerals are the smallest particles that matter can be divided while still maintaining its individual characteristics.”

Minerals derived from rock are called *inorganic* “metallic minerals” and contain a *positive* electrical charge. Colloidal silver has a *positive electrical charge*. *Organic colloidal minerals* come from humic shale which is

composed of prehistoric plant life in its concentrated form. Colloidal clay, as *montmorillonite clay*, is natural colloidal silicate minerals and trace elements. It is a rare form of earth greatly treasured by Native American medicine men and women. It is considered by geologists to be an ancient oceanic deposit rich with sedimentation, mineral elements, and sea life (seaweed, shrimp, algae) brought to the earth's surface by volcanic action.

The clay minerals are naturally chelated in an organic, easily assimilable form. A wonderful montmorillonite clay called, "Azomite", discovered by geological prospector, Rollin Anderson, of Utah,¹²³ is sold via the internet. (SONNE'S ORGANIC FOODS, INC.¹²⁴ makes a mechanically active adsorbent *colloidal bentonite* (U.S.P. Grade) which contains the active constituent montmorillonite, super refined with demineralized water as its vehicle.)

"Sick soil means sick people," says Anderson. "We now know," he said, "that the synthesis of all known natural mineral elements is the secret of the harmonious synergetic function that forms the basis of healthy living matter." The trace minerals "occur in such minute quantities they must be measured in parts per million, yet they appear to be basic in the complex chemical and electrical mechanism that makes up the human body. The form in which the major part of the natural inorganic nutrients are assimilated by animal and vegetable consist of material *in the colloidal state*."

The Hunza water was rich with colloidal glacial sediment full of electrically charged trace elements.¹²⁵ "Trace elements function as activators, as catalysts, within the living cell, be it plant, animal, or human; and they are the root of all living processes, with an influence out of all proportion to their size," said Melchoir Dikkers, Ph.D., Professor of Biochemistry and Organic Chemistry at Loyola University, in *The Story of Trace Minerals*¹²⁶, in 1931.

CAUTION: Be careful when ingesting colloidal minerals because they may contain high levels of mercury. ☆ Mercury is harmful even in the colloidal state. Some colloidal minerals on the market contain 100 times the amount of mercury considered "safe" by the FDA.¹²⁷ If you want to get good colloidal minerals, investigate. Beware, there are some colloidal silver sols on the market that are inferior, containing stabilizers, or worse, silver *nitrate* salts. Silver nitrate is toxic and is irritating to the body. The silver is

inert, having no electrical charge, which is the single most important factor in the colloidal silver treatment.

Researcher Daryl Tichy maintains, “there is evidence that colloidal solutions are sensitive to cosmic influence. Back to basic physics - a charged particle in motion produces a *magnetic field*. In a colloidal solution with billions of charged particles in motion the collective magnetic moment is significant. Cosmic and meteorological influences such as sudden variations in the Heaviside layer (sunspot activity, etc.) produce fundamental changes in the electrical field of the atmosphere, the earth’s magnetic field, atmospheric radiation phenomena, etc. The effects colloids and all living systems - plant and animal - which are all colloidal in nature.”

ANTIBIOTIC EFFECT

The colloidal condition is responsible for the *antibiotic effect*. Scientist, W. Kopaczewski writes:^{[128](#)} “Two facts seem to support the view that the antiseptic effect is attributable to the colloidal state:

(1) Only finely dispersed colloids have an antiseptic effect; this would indicate that the physical condition of the colloid is of importance...It was moreover shown by conductivity measurements and qualitative analysis that the amounts of silver and silver oxide in coarse-grained solution on one hand and in fine-grained on the other, is by no means equal, and that it is considerably higher in the latter.

(2) It was observed by V. Henri that when the inter-micellar fluid of a fine-grained colloidal solution was separated from the micelles (larger particles) by filtration, and (the micelles) added to a culture, it produced no antiseptic effect. This led Henri to the conclusion that the antiseptic effect is an inherent quality of the colloidal state.”

TESTING A COLLOID

If you are curious about the *potency* of your colloid solution, you can send a sample of your formula to any number of TESTING LABS across the country. The lab will test for *silver content* and give their findings in parts per million. Colloidal Science Laboratory, Inc. will test your colloidal silver solutions. Their fees have gone up, but their service is impeccable.

Colloidal Science Laboratory, Inc., 213 Irick Road, Westampton, NJ 08060

Phone: 609-267-2065 www.ColloidalScienceLab.com

Particle Size Distribution	\$299
Zeta Potential	\$199
Ultra Centrifuge Separation	\$195
ICP Measurement of total metal 1	\$199
ICP Measurement of ionic metal	\$299
Low ionic pH measurement	\$75
Conductivity measurement	\$49
Turbidity measurement	\$49

“CSL conducts advanced research and development in the field of metal colloids. We perform analytical measurements to characterize their physical properties. The laboratory is primarily involved in three fields of scientific investigation pertaining to colloids:

- 1) analytical measurements to determine their physical properties
- 2) development of processes that produce nanometer size colloidal metal particles and
- 3) development of real-world applications for metal colloid products.”¹²⁹

Also try the following laboratories:

Lancet Laboratories, Cnr Menton & Stanley Road,
Johannesburg, New Zealand

Phone: 0861 526238 (Open 24 hours) www.lancet.co.za

Associated Laboratories, 806 N. Batavia, Orange, CA 92668

Phone: 714/ 771-6900 www.associatedlabs.com

They do a concentration test (mg/L) of total dissolved solids.

Kimball Laboratories, 600 East 11800 South, Draper, UT 84020

Phone: 801/ 571-3695 www.kelilabs.com

They provide analysis of Tyndall Effect and Precipitation test.

EMS Laboratories, 117 West Bellevue Drive, Pasadena, CA 91105

Phone: 818/ 568-4065 www.emslabs.com

They test particle size.

Call the labs for pricing and services offered. Because the labs are busy, only call if you are seriously considering using their services. Don't waste their time unless you plan to submit samples for testing with payment.^{[130](#)} *Samples will not be returned to you.* Once a sample of your CS has been tested, and you use the same process to create colloidal silver, the silver content should remain constant.

There are a few different methods to self-test to see if a sol *contains colloids* other than the use of an *electron microscope*. The easiest way, is to add common table salt to the sol and if it turns cloudy, you have ionic silver in suspension.

THE SALT TEST

This is an easy test. To find out whether a solution is ionic silver and actually has silver suspended in the solution, you simply add table salt (chloride ions). If silver is present, the salt will combine with the silver ions and create a white, cloudy appearance. There must be a sufficient concentration of silver ions to create a cloud, typically about 10 ppm or above. Put 1-2 ounces of CS in a clear glass, and add ¼ tsp. of table salt. If there is silver in your CS, you will observe a white cloud of silver chloride form in the glass, and eventually, the entire CS sol will turn cloudy. The more salt added, the thicker the cloud appears, as the silver chloride becomes denser. If no cloud appears, there is no silver suspended in the solution. If that happens to your home brew, check the batteries in your CS unit to make sure they are working. When trouble shooting, it can only be: batteries, water, or silver. Unfortunately, some CS products on the market will not make a white cloud salt is added because they contain no silver at all, or very little silver. "Believe it or not, lab analysis has shown that some 'silver' products actually contain no silver!" reports the Silver Colloids website.^{[131](#)}

FARADAY-TYNDALL EFFECT

One procedure, slightly more complicated, is by observing the *Faraday-Tyndall cone effect*. Named after England's scientific genius of the 1800s, Michael Faraday, and his contemporary, Ireland's renowned natural philosopher, John Tyndall. In their book, *A Short Textbook of Colloid*

Chemistry, B. Jirgenson and M.E. Straumanis discuss this process. If a colloidal sol is *true*, when a sharp, intense beam of light passes through it, the path of light will appear to be obscured. The path of light is altered and will form a cone shape within the water. This path of light can be observed by taking a test tube or jar of colloidal silver into a dark room and shining a bright flashlight (or laser) through it. It should be viewed from the top of the liquid. The CS sol should not have any *sparkles in the Tyndall*, as it indicates larger particles.

Colloids scatter light; a beam of light can be seen going through a colloid because the colloidal particles reflect the light. It is the same principle as being able to see sunlight passing through air that contains dust particles. An interesting fact is that a laser light will *not* show through distilled water, however, it *will* show through a sol of Silver Colloid. So, as another method of testing a colloid, you can purchase a laser pointer (the kind teachers use when giving a slide presentation) at Radio Shack® for about \$15.00, or expensive lasers for up to \$100.00. When the red laser light is pointed at a glass of liquid containing plain water, the beam of light will be visible on the side of the glass nearest the laser, and again on the opposite side of the glass, but not *in* the water. If the water contains colloids, the beam will shine *through* the water as well.

MURIATIC ACID TEST

Depending on how interested you are in these fun chemical experiments, another method is to use Muriatic acid and clear ammonia. Add five drops of Muriatic acid with a glass eyedropper to two ounces of colloidal silver sol. After 30 seconds, you should see tiny, white crystals forming on the bottom of the container. Cautiously pour off the silver water and capture the crystals on a clean cloth and allow them to dry. Next, mix a half ounce of ammonia with a half ounce of water in a small container. Drop the white crystals into the ammonia water. If the crystals dissolve, it means they *are* silver salts - attesting that the solution *does* contain silver.

SUNLIGHT

Another very simple test to see if you have made *colloidal silver* is to put the sol in the sunlight. However, sometimes CS is light sensitive and sometimes it is not, related to particle size and the pH. If it turns yellow, you can be assured that you have silver in suspension. It can take 5 minutes

to 3 hours, depending on the quality. The longer it takes, the better quality CS. The type of test you use is your choice, have fun! The most reliable test is to use the laser pointer and look for the Tyndall. You can always send it into a lab, and not worry about it. But, if you like to investigate on your own, these methods are not too time consuming and are interesting to observe.

Dr. Phillip Burris, Ph.D. found the *hepatitis A virus* to be the most resistant to silver ions, the *polio virus* less resistant, and the *rotovirus* the most sensitive.¹³² The following is a documented list of silver-resistant bacteria:¹³³ *Citrobacter freundii*, *Enterobacter cloacae*, *Enterobacteriaceae* (some strains), *Escherichia coli* (some strains), *Klebsiella pneumoniae* (some strains), *P. stutzeri* (some strains), *Proteus mirabilis*, Vegetative *B. cereus* spores (some strains).

GEOMETRICAL LATTICES

When a living organism, such as a plant or an animal, takes in water it structures it into a composition with a high percentage of octagonal liquid crystals and a very low percentage of unorganized molecules. This, said Flanagan, is done by means of *high-energy colloids*. Rather than the structure of ordinary solids, the atoms in a crystal are arranged in orderly *geometrical lattices*.

“Some crystalline materials have spaces in the lattice where other atoms can fit. The atoms of these impurities may have more or fewer electrons than the atoms of the lattice material. Since the forces of the latticework structure hold the same number of electrons in place around each atom, the ‘extra’ electrons of the impurity atoms are free to move through the lattice without being bound to any particular atom.”

CHAPTER 14

MICROCLUSTERS IN ACTION

There is only one good, *knowledge*, and one evil, *ignorance*.

~Socrates

WHAT IS A MICROCLUSTER?

Nota Bené: *This chapter is for the chemist at heart. Microclusters* consist of small aggregates comprising from two to several hundred atoms and constitute a *distinct phase of matter*. Many cluster properties are determined by the fact that a cluster is mostly surface. English chemist, Robert Boyle, in his book, *Sceptical Chymist*, made perhaps the earliest reference to clusters in the year 1661. He spoke about, “minute masses or clusters were not easily dissippable into such particles as compos’d them.”¹³⁴ Because technical difficulties prohibited research into clusters, it wasn’t until 300 years later, in the 1950s that clusters could be investigated.

STABLE CLUSTERS

Initially, clusters were created by vaporization of a metal in an oven. Later, in 1981, a procedure used to vaporize solid metal was done with a laser. Two groups: AT&T Bell Laboratories (led by Vladimir E. Bondybey), and Rice University (led by Richard E. Smalley) devised this laser-generated method of creating clusters. Their procedure includes an ultraviolet laser, which strips electrons from the clusters. “The removal of the electrons imparts a positive charge to the clusters, so that they can be accelerated in an electric field of given strength over a path of known length,” so state Michael A. Duncan and Dennis H. Rouvray in “Microclusters.” ¹

Clusters have interesting geometrical shapes and sizes, some stable, some not. Colloidal silver clusters are *stable*. Cluster species that are stable configurations appear as spikes when the number of atoms is graphed. These are called *magic numbers*.¹³⁵ They may have a 10-atom formation in

a diamond lattice structure, or a sevenatom cluster formed in pentagonal bipyramids, etc. These configurations are considered *building blocks*. Bonding patterns emerge in a class of stable molecules known to inorganic chemists as *Zintl ions*, suggesting their patterns are the same.¹³⁶

Regarding cluster geometry, *Duncan and Rouvray* say, “Electronic configurations, for example, have a direct bearing on the frequency of various cluster sizes because specific electronic bonding patterns make certain clusters particularly stable. These patterns depend on the orbitals from which the electrons originate and on the degree of freedom enjoyed by the electrons. When electrons are shared by the whole cluster in a delocalized pattern, so that negative charge is no greater at one point than another, the cluster may take on certain aspects of solid metal, such as conductivity. When the electrons are all tightly bound to atoms, the clusters resemble discrete molecules.”

IONIZATION POTENTIAL

There is a certain amount of energy required to create clusters. In the case of molecules, this is called the IONIZATION POTENTIAL; in the case of solids, this is known as *the work function*. “Lone atoms grip their electrons more tightly than clusters of atoms grip shared electrons, which is why most metals have ionization *potentials* about twice as high as their *work functions*. If clusters behave like bits of a solid, theory would predict a smooth, inverse relation between cluster size and electronbinding energy that would converge, at the limit, with the work function.” This converging takes place only in larger aggregates, usually in clusters consisting of over 100 atoms; although, studies have shown that clusters having different physical characteristics tend to converge with those of solids at different states.

BONDING

The *bonding* of electrons seem to be more localized in clusters of main-group metals.¹³⁷ Their outer-most electrons occupy the *p* orbitals, which are spatially more constricted. “Only *p* electrons participate in bonding, which gives the bonds more of a local character than is the case for the alkali¹³⁸ and coinage¹³⁹ metals.” The main-group metals sometimes form naked

clusters when dissolved in liquids, as exemplified by the stable Zintl ions. “*d*” bonding is involved in transition metals.¹⁴⁰

Metals differ in their effects and actions. Activation vs. Inhibition releases different interactions. Metals, when activated through weakening of the electron density on the susceptible bond by the charge on the metal, reinforces the action of other positive groups on the enzyme active site. *Inhibition* transpires at higher metal concentration because it involves binding to weaker binding sites. These phenomena illustrate how different metals may produce a given effect in different degrees or at different concentrations. Metals differ QUANTITATIVELY in their activity. Metals also differ QUALITATIVELY in the types of reactions that they elicit. Silver specifically has an interaction with nucleic acids. It is apparent that silver has dramatic effects on the structure of DNA directly as well as on the way in which DNA molecules are packed together in an organized three-dimensional pattern.¹⁴¹

Clusters have unfilled bonding capacity which makes them adsorb¹⁴² readily. Their tiny size limits the number of possible adsorption geometries. These properties make clusters good catalysts. Cluster catalysis has been studied by the *Smally and Kaldor* groups, Argonne National Laboratory (led by Stephen J. Riley), *UCLA, the University of Utah*, and several other institutions. *Duncan and Rouvray* say, “The discovery that small changes in cluster size can produce large differences in adsorptive behavior strengthens the notion that clusters represent a distinct phase of matter.” Industries are still using catalyst technology that *Duncan and Rouvray* consider a *black art*. Now, industries are, for the first time, using the secrets of catalysis, and are beginning to yield to the tools of *cluster science*.

CHAPTER 15

METHODS OF PRODUCTION

When I examine myself and my methods of thought, I come to the conclusion that the gift of fantasy has meant more to me than my talent for absorbing positive knowledge.

~Albert Einstein
Einstein, the Life and Times
by Ronald W. Clark

METHODS TO THE MADNESS

There are *three methods* used to create colloidal silver:

- Electrolysis • Chemical • Grind

Of these three methods, the *electrolysis* is considered superior and most popular, and the grind method *obsolete*. There are two GRADES of colloidal silver sol. These can be classed as *high grade* and *low grade*, or SUPERIOR and INFERIOR. Naturally, you will want to use *high grade sols*. High grade colloids are those that contain the smallest of microclusters with the greatest number of silver particles, and no particles that have fallen out of suspension. Both the low and high grades contain *some* fallout, due to the oxidation process. However, a premium sol will have so few that they will be hard to detect. The superior formula retains a light, clear to golden color. They will contain **no** artificial stabilizers, chemicals, or additives. The high grade microclusters are able to penetrate the body's membrane linings and cell walls.

Low grade sols are INFERIOR. They form larger molecular clusters with fewer silver particles, and more flakes in the formula. The low grade colloidal silver *can* be used externally, but the larger particles make it difficult for them to pass through the membrane linings. The color of the water of a low grade product will tend to be darker or even black in color,

however, color is not necessarily indicative of an inferior colloid.¹⁴³ Inferior formulas may contain stabilizers, chemicals and/or other additives.

ELECTROLYSIS METHOD

There are four standard electrolysis methods of CS production:

1. **EIS** – Electrolytically Isolated Silver aka Ionic Silver or *Electro-Colloidal Silver*
2. **MSP** – Mild Silver Protein
3. Silver Salts
4. True Colloidal

The *electrocolloidal* process creates an electro-magnetic charge that produces extremely fine silver particles, holding the silver in suspension. Electrical methods have been used since the late 1800s. The currently accepted method of electrolysis is done simply by using silver electrodes and either low or high voltage electricity, and distilled water. Some manufacturers use laser technology. The *Bio/ Tech News*, reports “the best and most effective method is the *electrical process* since it is the only method which preserves the necessary homogeneity, minuteness of granules, purity and stability to create a true colloid.”

The EIS is the most definitive, superior, and most popular method of choice. The manufacturers of “true colloidal silver” say their product is superior, which could be. However, the EIS product works, and everyone can afford it. This is about getting a good, affordable product to the masses. And it is a GOOD product!

Most manufacturers of colloidal silver use a low voltage (27v -36v D.C.) - low amperage current. Some use a high voltage (120v D.C. to 27,000v) - low amperage machine,¹⁴⁴ oftentimes made with neon sign transformers at 15,000 VAC spec, loaded to 10,000 volts. The HVDC (or HVAC) may or may not be more advantageous, depending on who’s selling. Both methods work. The most important key is to use pure, distilled water.

When manufacturing colloidal silver through electrolysis, microscopic particles of silver *jump* off the silver electrodes into water. You can watch the process take place. When the water becomes electrically charged, the *positive (+) electrode* bubbles and becomes a faint mist (“ionic cloud”) of microscopic silver ions.

The electrical field weakens the adherent that holds atoms together, and they become loosely bonded, or clustered. The electrical charge keeps the particles in constant motion, causing the particles to propel themselves through the sol, remaining in suspension.

The electrically produced clusters are so profuse that organisms, when introduced to this sol, cannot help but connect with the particles and thus, die. If you do make your own formulas, place the sol in a dark place for about twelve hours, giving any particles time to settle or fall out. It happens. It is then recommended to strain the sol. Never drink particles you can see! Better yet, throw it out and make a new batch.

CHEMICAL, GRIND, WAVE & LIQUID

A little more history here. The chemical method has been used since the 1860s using chemical action. Because of the toxicity of the powerful acid used to break down the silver in the chemical method and the impossibility of removing the toxic chemical nitric acid, it is out of favor. The Grind, Wave, and Liquid methods are all obsolete.

The Grind Method, or *powdered silver* was most often applied from around 1920 to 1938. It leaves the particles so large that they lose their colloidal value. The Wave Method was used in 1910 using Radiant Energy and in 1921 using *Ultrasonic waves*. The Liquid Method used prolonged boiling in water in 1910, Mercury Vapor condensed on water in 1920, and Homogenizers in 1930. Mercury vapor is very toxic. Manufacturing Methods are as follows:

GROUP	METHOD	DATE
Chemical	Chemical Action	1860
Electrical	Electrolysis	1860
	Electrosputtering	1898
	Electrical Arcs	1924
	Cathodic atomization	1926
	Vacuum evaporation	1927
Wave	Radiant Energy	1910
	Ultrasonic	1921
Liquid	Prolonged boiling in water	1910
	Mercury Vapor condensed on water	1920
	Homogenizers	1930
Grind	Colloid Mill	1920
	Disk/ China Mill	1924
	Aerodispersion Mill	1927
	Ball Mill	1938

CHAPTER 16

SILVER MANA HISTORY

When health is absent, wisdom cannot reveal itself, art cannot become manifest, strength cannot fight, wealth becomes useless, and intelligence cannot be applied.

~Herophilus
physician to Alexander the Great

THE NOT SO DISTANT PAST

Silver, the aristocratic, *noble* metal (along with gold and platinum) has been utilized as jewelry and household wares for *thousands* of years. Articles of silver have been found in Egypt dating about 4000 B.C., and a fine Chaldean silver vase dating about 2850 B.C. can be seen at the Louvre. The first indisputable case providing evidence of silver used as medicine is from the Mohammedan School of Geber (703-765 AD).¹⁴⁵ Silver has also been used in medicine for thousands of years for treating infections of the eyes, ears, nose, throat, and skin.

Most of the articles about colloidal silver remind us that not long ago, it was a common practice to put a silver coin into a bottle of milk to keep it from souring, or into a bottle of water to purify it, much as the early American settlers placed pure silver dollars in their canteens. The ancient Greeks and Romans put silver in their urns. In the Middle Ages, the wealthy citizens or *blue bloods*,¹⁴⁶ usually royalty, ate their food with silver utensils. They were less susceptible to succumbing to the ravages of the plague.

Alexander Hamilton, as U.S. Secretary of the Treasury, in 1792 proposed the adoption of a gold and silver based monetary system for the United States. Coins were 90% silver. Silver continued being added to circulating U.S. coins until the supply of silver could not meet the demand for coins and the face value of the coin fell below its bullion, or meltdown, value. In 1965 the U.S. government eliminated the addition of silver from quarters and dimes, reducing half dollars to 40%. Today in the United

States, silver is used only in bullion, commemorative, and proof coins. U.S. coinage is now based on the elements copper, nickel, and zinc.. At this time, Mexico is the only country using silver in it's circulating coinage.¹⁴⁷ The 2011 Mexican Silver Libertad One Full Troy¹⁴⁸ Ounce coin is composed of 99.9% silver!

The use of colloidal silver was common until the late 1930s when production costs became prohibitive. At that time, the *silver mana* retailed for about \$100.00 to \$200.00 per ounce. CS is actually the old-fashioned, *classic medicine*. It has been laboratory tested with amazing significance. The laboratory data has proven CS produces excellent antitoxin results. Medical journals dated before 1940 contain numerous articles about the uses of CS. One article, from the British Medical Journal¹⁴⁹ dated February 1923, is entitled “Colloidal Preparations of Silver in Pharmacy” and states, “pure silver is entirely non-irritant. In tests, at very high dilution rates, exceeding two-hundred-thousand to one, it has been shown repeatedly that the rapidly exerted disinfectant action is of considerable therapeutic value.”

BANISHED FROM THE COURT

The use of colloidal silver fell out of favor for *three reasons*: **1.)** the exorbitant cost; **2.)** the discovery of “wonder drugs” – prescription antibiotics; and **3.)** because the method used to create the colloidal silver at that time was inferior.¹⁵⁰ It tended to cause *Argyria*¹⁵¹ in a small number of patients. Often, it was the silver craftsmen and the workers who cleaned silver who developed problems. The form of silver they were absorbing was not colloidal. Colloidal silver usage was quite rapidly replaced with the less expensive (to produce) prescription drugs. Unfortunately, colloidal silver cannot heal ignorance, which is the worst form of disease.

You might not remember when a silver nitrate solution was used in newborn babies' eyes to insure against the blindness caused by gonorrhea but, to some of us it doesn't seem that long ago. It was a method developed by German obstetrician Dr. Carl S.F. Credé in 1884. Granted, the (1%) silver nitrate compound is irritating, but completely effective.¹⁵² Silver nitrate was also used to treat ulcers at the turn of the century. The pharmaceutical companies couldn't make any money from this inexpensive treatment, and they lobbied successfully in getting antibiotics to replace the silver sol. Not only that, but the silver treatment is no longer taught in

medical schools, and standard medical supply sources no longer make the silver water available. Silver nitrate is toxic. *Colloidal* silver is not painful, it is effective, and cost effective, too.

In 1968, a silver composite of silver combined with *sulfadiazine*, was first synthesized by Dr. Charles L. Fox, Jr., of Columbia University. It is 50 *times* more powerful than sulfadiazine alone. It has become the most widely used drug for treating burn victims and has been used in 70% of the burn centers in the United States. This propelled silver to the forefront of treatment for burns and other clinical uses. Thus, the comeback of silver in medicine began. In the 1970s, the late Dr. Carl Moyer, brilliant physician and chairman of Washington University's Department of Surgery, received a grant to develop better treatment methods for burn victims. Dr. Carl Moyer worked with Dr. Harry Margraf, as the chief biochemist, and other surgeons to find a strong antiseptic that was safe to use over large areas of the body.

After reviewing medical literature, Dr. Margraf found several references to silver described as a catalyst that disables the enzymes microorganisms depend on to *breathe*. Consequently, the microorganisms suffocate and die.

Some of the common medicinals made from silver and their uses are: *Silver sulfadiazine* (bacterial and fungal infections, burns), *Silver nitrate* (disinfect newborn eyes), *Silver iodide* (disinfectant), *Silver chloride* (disinfectant), *Silver lactate* (antiseptic and astringent), *Silver oxide* (epilepsy and chorea), *Silver picrate* (trichomoniasis and moniliasis), *Metallic silver in colloidal form* (antibiotic, etc.).^{[153](#)}

According to Dr. Robert Becker's colleague, Dr. Joseph Spadaro of Syracuse University, there are over 50 physicians doing research with silver. As of 2011, that number is much larger. Recent *laboratory studies* show that silver also promotes the production of new cells, increasing the rate of healing in wounds and bone. The regeneration of whole sections of missing skin is being achieved by the use of silver treatment. A researcher at Brigham Young University sent CS to two different labs, including UCLA Medical Center, which said, "It has killed *not only* the HIV Virus, but *every virus* that was tested in the lab."

TRADITIONAL MEDICINES

CHINESE MEDICINE uses silver to fight infection and disease. Acupuncture needles are used along the body meridian lines to stimulate *chi* (or *qi*) meaning energy. The acupuncture needles of today are commonly made of silver because of silver's magnificent ability to transmit heat and energy effectively. According to Nakayama in *Acupuncture et Medecine chinoise*, in ancient times the acupuncture needles were made of the yellow metals (Yang), gold, copper, etc.—which have a stimulating, vivifying power; and the white metals (Yin), silver, chrome, zinc, etc. – which have a calming, dispersing power.

Dr. Becker, in *The Body Electric*,¹⁵⁴ says an Army colonel told him that *acupuncture* effectively works, “I can tell you for sure it does work,” he [said], “It definitely relieves pain. But we don't know *how* it works. If we knew that, the Army might adopt it for use by medics in wartime.” The colonel asked Dr. Becker if he thought acupuncture might work electrically, the same as regeneration seems to.

A decade after the colonel posed that question, Dr. Becker was in China as a journalist, with *New York Times* columnist James Reston. They watched acupuncture used in several operations as the only anesthetic. “The acupuncture meridians, I suggested, were electrical conductors that carried an injury message to the brain, which responded by sending back the appropriate level of direct current to stimulate healing in the troubled area. I also postulated that the brain's integration of the input included a message to the conscious mind that we interpreted as pain. Obviously, if you could block the incoming message, you would prevent the pain, and I suggested that acupuncture did exactly that.

“...If the points really were amplifiers, then a metal needle stuck in one of them, connecting it with nearby tissue fluids, would short it out and stop the pain message. And if the integrity of health really was maintained by a balanced circulation of invisible energy through this constellation, as the Chinese believed, then various patterns of needle placement might indeed bring the currents into harmony, although that part of the treatment has yet to be evaluated by Western medical science.”

In India's own AYURVEDIC MEDICINE, silver is prescribed to build strength and stamina. Silver is used to fight chronic fever and weakness, intestinal inflammation, gallbladder problems, heartburn, excessive menstrual bleeding, and liver and spleen disorders. Ayurvedic healers have

used the healing properties of metals for thousands of years to purify and strengthen the body. It is Ayurvedic belief that when applied to the skin, pure metals induce an electromagnetic influence, acting upon the physical cells and deeper tissues.

THERE REALLY WAS A SHANGRI-LA HUNZAS

There are many documented accounts of longevity; people who have lived to be well beyond centenarians, from Mexico, Peru, Ecuador, Greece, Turkey, Russia, India, China, etc. However, the most interesting group of people studied for their health and longevity are the legendary inhabitants of Hunza, a constituent of Pakistan. These hardy people, as recounted in the *Secrets of the Soil* by Peter Tompkins and Christopher Bird¹⁵⁵, were found in a remote and inaccessible valley, surrounded by the snow-capped Himalayan and Karakoram mountains, a virtual Shangri-La. According to visitors, the Hunzakuts are described as “the healthiest, happiest mortals,” having bronzed, Caucasian features with dark hair, “rosy complexions, good features, and lovely eyes.”

They never had any hardening of the arteries, kidney stones, tooth decay, arthritis, osteoporosis or heart disease. Being happy and content, excelling in charm and intelligence, the Hunzakuts were free of disease and neurosis.

LOST WISDOM

The lost wisdom of the ancients has always been a curiosity. Now that we are living in a time when a multitude of hostile conditions threaten our environment on a global scale, people are not looking for immortality, but a life free of disease and toxicity. It's true that because of modern conditions, people are living better lives and living longer than was the norm a hundred years ago. The impending danger of disease has always threatened us, aging has always troubled us, and longevity has always eluded us. In his book, *Paradise Found Or The Cradle of The Human Race*, William F. Warren presents the opinion that humankind originated on the famed Hyperborea, a tropical continent of the ancient Greeks where inhabitants lived more than a thousand years without the infirmities of aging. Greek philosopher, Herodotus wrote, “The oldest inhabitants of Greece, the Pelasgians, who

came before the Dorian, Ionian and Aeolian migrations... with their diet of dates and oranges, lived on the average of more than 200 years.” The Hunzas are known for living hardy lives. They are famous for their Spartan diet, disease free environment, and longevity.

GLACIAL MILK

The inhabitants of Hunza are known for their mental, physical, and emotional superiority. Why? What is their secret? The Hunza diet consists of organically grown fruits, vegetables, grain, unpasteurized goat milk and butter. Their strict Spartan diet is only one of their secrets. Another is the finely powdered mineral-rich silt, made by the grinding action of massive glaciers, used in their lovingly tended gardens. But the *real secret* of Hunza health appears to be their heavily mineralized GLACIAL WATER, referred to as “*glacial milk*” because of its milky appearance. According to John A. Tobe, an American traveler, who analyzed the mineral-rich Hunza water says that the minerals go into the soil in a colloidal state. They have an especially high count of silver.

There are three things which build and maintain civilization throughout time: pure air, pure water, and pure food. And as a truth eternal I say unto you, that there are three things which bring the end of civilization, even the mightiest that have ever been and shall ever be, from the beginningless beginning to the endless end of all time: impure air, impure water and impure food.

~Zend Avesta c.3000 B.C.

When analysis of Hunza water was made by respected researcher and author Dr. Patrick Flanagan¹⁵⁶, and Romanian scientist, the late Dr. Henri Coanda,²⁰ it was shown to contain almost every known mineral element, with an especially high content of silver in colloidal form – in suspension, not dissolved as in most ionic forms. In 1974, Flanagan discovered that crystals of quartz and precious gems affect the surface tension of water.

Flanagan tried for years without success to duplicate the colloidal minerals of the Hunza water in his laboratory. “I tried all kinds, many of them clays. But none had sufficient electrical charge to lower the surface tension of water down to the sixty-eight figure characteristic of Hunza water.”

Flanagan eventually succeeded by using a vortex (spiral, whirlpool), an idea he got from Theodore Schwenk's *Sensitive Chaos*.^{[157](#)} To simplify a very complicated process: flowing water, being divided into extensive inner surfaces, or layers, move against one another. When obstructed in any way, it causes the inner layers to flow at different rates of speed, which form vortices. These spirals separate from the rest of the liquid and generate electrical current. Therefore, the vortex puts an electrical charge on the particles of matter suspended in the water and renders them colloidal.

In *Secrets of the Soil*, it's stated that the Hunzaland was a "heaven on earth" until the time came when the "Pakistani army built a military road through the land... Shangri-La is Shangri-La no more."

CHAPTER 17

LIQUID MAGIC – SILVER, GOLD & COPPER

Make new friends, but keep the old, one is silver and the other gold.

Old Folk Song, *Make New Friends*

ANCIENT MYTHOLOGY

SILVER & GOLD

GOLD and SILVER have long been considered *aristocratic* metals. Their value and worth a material significance. Ownership of gold and silver meant *wealth*. It still does. The ancients taught that *silver* was “gold with its sun-ray turned inward instead of objectified.” *Silver* is the feminine principle, and is referenced to the moon. Since antiquity *silver* has signified life, purity, innocence, joy, and light, symbolizing the purified and regenerated human nature of man.

Legends say *gold* is representative of the masculine principle of the universe, symbolized by the sun, the symbol of immortality. “It has caused nations to rise and nations to fall.” *Gold* has long represented the spiritual soul, life force, ego, and truth. Tales abound of Medieval alchemists trying to turn base metals into gold. Here we are about to enter a new millennium, and gold and silver are just beginning to prove as valuable as the ancients had only hoped. Their value is not so much calculable in the *material aspect*, as in beautiful jewelry, but in their *health aspects*, one the masses can afford to benefit from, and the most precious.

At the *First International Conference on Gold and Silver in Medicine in Bethesda*, Maryland on May 13-14, 1987, both gold and silver were shown to be clinically effective for treating medical problems. At this time, no one knows why gold works. Actually, there remains much to be learned about both metals.

GOLD

Gold's chemical symbol is Au, has its origin in Latin, *Aurum* which comes from the word *aura* or *aurous*, meaning “pertaining to or containing gold.” Its atomic number is 79 and its atomic weight is 197. Being one of the heaviest metals, it is 19.3 times as heavy as water. It is the softest, most pliable and malleable of all metals. It can be “beaten into sheets so thin it would take 300,000 sheets to make a pile an inch high. A single ounce can be drawn into a wire so thin it would be over fifty miles long.” Folklore tells of the use of gold for healing skin ulcers and burns and pain control. In 1890 Dr. Robert Koch discovered that the *Tubercle bacillus* could not live in the presence of gold. *Chrysotherapy* is the administration of gold-based drugs for medicinal treatment.

CHRYSOTHERAPY

Chrysotherapy or *Gold Drug Therapy* has been used for therapeutic applications by the ancient Egyptian and Chinese civilizations. Its effectiveness in antiquity is not known. Gold sols were prepared by alchemists using *aqua regia*, a combination of hydrochloric acid and nitric acid. They were *highly toxic* and usually limited to topical application in the treatment of disorders such as leprosy. In the late 19th century, with the discovery by physicist, Louis Pasteur, of the germ theory of disease (microorganisms and their causative role in infectious human diseases), drugs evolved as the *art* of using an agent that would selectively inhibit or destroy infectious organisms without, at the same time, destroying their human hosts.

The first proof showing gold's clinical effectiveness for rheumatoid arthritis was revealed almost a century ago, in 1929,^{[158](#)} as reported by Forestier. It has most likely been used more than a century ago. Edgar Cayce, The Sleeping Prophet, used to prescribe gold for arthritis prior to 1920. Not being a doctor, it's probable Cayce's recommendations were not acknowledged by mainstream medical journals, who would have sidelined him and his medical knowledge. At the *European Rheumatism Council* in 1960 it was confirmed that intravenously administered gold is an effective treatment for rheumatoid arthritis. This information led doctors Michael J. DiMartino, Blaine M. Sutton, and Donald T. Walz at SMITH KLINE and

FRENCH LABORATORIES to research gold, which reached a successful verdict in 1985 that renewed interest in gold as a therapeutic agent.

The goals of Chrysotherapy or *gold drug therapy* have been to reverse, inhibit or prevent the pathogenic progression in rheumatoid arthritis that damages cartilage bone and other connective tissues by direct or indirect action of oxygen radicals and the inflammatory/ immunological injury that follows. Gold gives us an approach for gaining additional insights into the metabolic, biochemical, immunological, and inflammatory pathogenic mechanisms.

COLLOIDAL GOLD

Home-brewed colloidal gold is made the same way colloidal silver is made, using the same type of low voltage generator, 24k gold, and distilled water. It takes longer, about 20 minutes to make a 2 ppm CG. The water will be a nice clear color, but if the electrodes are left in too long, the water turns a pale lavender. Two 24k rods, of 22 gauge wire rods, will make approximately 24 gallons of colloidal gold. That used to be very economical, but gold prices have gone sky high!¹⁵⁹ Like colloidal silver, *colloidal gold* is a pure, all natural supplement of sub-microscopic nano (billionth) size particles of gold electromagnetically charged and suspended in pure, distilled water. It is *bio-available*, *non-toxic*, *tasteless*, and *odorless*. It promotes a general euphoric feeling of well being, stimulates the body's restorative functions, enhances the body's natural defenses against illness and promotes vitality and longevity. When applied *topically*, it does not have the same antibiotic / germicidal action that CS offers. Silver and gold are quite different.

KEY CHARACTERISTICS

- ♦ Safe
- ♦ Non-Toxic
- ♦ Non-Irritant
- ♦ Antibiotic
- ♦ Physical & Emotional
- ♦ Non-Invasive
- ♦ Non-Addicting
- ♦ Bio-Available
- ♦ Stimulates Healing

- ♦ Internal/ External Application
- ♦ Promotes Vitality
- ♦ Non-Accumulative
- ♦ Promotes Longevity
- ♦ Tasteless/ Odorless
- ♦ Anti-Inflammatory

Rather than in a chemical compound, as in gold *drugs*, gold in the *colloidal state* may be applied medicinally in a much more concentrated form, with correspondingly better results. *Commercially* made colloidal gold is made by charging pure 24k gold and distilled water with high voltage electric unit. It is then sometimes treated with Ozone (oxygen) and passed through a powerful magnetic field. One major difference between *Colloidal Gold* and *Gold Drugs* is cost. Gold drugs are *expensive*. You can make colloidal gold for a *very nominal* price. The colloidal gold process is for *experimental purposes only*.

GOLD THERAPY

Colloidal gold has *strong unequalled effects* on the *physical health* as well as *emotional health*.

KEY APPLICATIONS

- Alcohol Addiction
- Anguish
- Arthritis / Rheumatism
- Brain Function
- Burns
- Bursitis
- Cancer
- Chills
- Chronic Inflammation
- Circulatory Problems

- Depression
- Despair
- Digestive Disorder
- Drug Addiction
- Fear
- Frustration
- Gland Function
- Heat Flashes
- Immune Function
- Melancholy
- muscle pain
- Nerve function
- Night sweats
- Obesity
- Puncture Wounds
- Sorrow

Gold Therapy is helpful in treating: Depression, Inflammation, Circulation, Pain, and Stress Relief, immunoregulatory activity, inhibition of infections (viral and bacterial), and stabilization of collagen. It creates a beneficial balancing and harmonizing effect on the rhythmic balancing and healing activity of the heart, improves blood circulation, rejuvenates sluggish organs (especially the brain), assists the digestive system, as well as promoting renewed VITALITY and LONGEVITY. Colloidal gold has been found useful in cases of glandular and nervous incoordination because it helps to rejuvenate the glands and stimulate the nerves. It helps release pressure, allowing the nerve signals to function and reach through to the various organs and glands. Colloidal Gold also regulates body temperature. Gold is a catalyst for endorphin-like hormones, as well as the antioxidant enzyme SOD.

GOLD DOSAGE

The medicinal indications for colloidal gold taken *internally* is one teaspoon per day. According to Dr. Joel D. Wallach, a mixture of Knox® gelatin and *colloidal minerals* is a great benefit for arthritis sufferers. The gelatin may lessen the potency of the colloidal minerals, but the combination is supposed to work well, as *long as it is fresh*. We are mentioning this because gold is respected as a health remedy for arthritis. A few manufacturers are offering silver and gold combination formulas. Some offer colloidal silver, gold, and platinum formula. One such formula contains hydrogen peroxide, another contains Aloe Vera. Use caution if you intend to experiment. If you add anything to the CS, use brew immediately.

Gold metal is worn *externally* to help arthritis sufferers, as is copper. Gold should *not* be taken in a ground metallic form because the toxic reactions could cause problems for digestion and kidneys.

SIDE EFFECTS of GOLD THERAPY

If you are *allergic* to gold, for obvious reasons *do not use colloidal gold*. Bear in mind gold jewelry has other metals mixed with the gold, which could be causing reactions. Colloidal gold has no known side effects other than the usual: Allergy, Healing Crisis (Herx), Diarrhea.^{[160](#)}

Gold *drug* preparations made of *compounds* have created gold induced *proteinuria* and *skin rashes*. Because the ability of the gold therapy to generate a high degree of remission of arthritis, the side effects were considered worth the risk. “Gold salts” used for some injection treatments can be dramatically effective, but are considered very toxic. They were manufactured by dissolving gold with very powerful substances called *cyanide salts*. CYANIDE IS ONE OF THE MOST TOXIC POISONS KNOWN. ☠ Serious toxic and *sometimes fatal reactions* were associated with the administration of the gold complexes. Gold-sulphur compounds were found to be safer, though used with caution. Gold-sulphur complexes have also been reported to be beneficial in the treatment of psoriatic arthritis, discoid lupus, pemphigus vulgaris, and bronchial asthma.^{[161](#)} Gold compounds of disodium thiomalato-S-aurate (I), or *Myochrisine*, is the gold drug of choice in Canada.^{[162](#)} It has been shown to inhibit lymphocyte, macrophage and neutrophil functions.

Gold /salt sol injections resulted in one out of every six patients stopping treatment due to toxic side effects. Out of the five patients that continued treatment, one had no effects whatsoever, three benefited, and one patient's arthritis was not reversed, but all pain and other evidence of active disease was stopped. Chrysotherapy using gold drugs is effective for only about half of the patients tried, making it easy to suggest that it may not be the gold drugs themselves which are effective, but rather some other cause.

ACCUMULATION of gold by kidney, liver, and spleen, as well as joint accumulation is common with the gold complexes. Naturally, the aim has been to *avoid* toxicity while at the same time *retain* efficacy. Colloidal gold is perfect for the task. *There is no gold-retention with colloidal gold.*

RESEARCH

Colloidal gold is still in its research stage. Dr. Frank Shaw, of the University of Wisconsin- Milwaukee, chairman of the AMERICAN CHEMICAL SOCIETY SESSION of GOLD and PLATINUM in MEDICINE, declared that in 1986 over 40 people were researching gold properties, and there are even more investigating gold's health benefits now. Studies at the cellular and molecular levels suggest that gold compounds may be directed to different targets in the cell and have distinct mechanisms of action. Further studies will serve to better understand Colloidal gold's biochemical and pharmacological activities.

COLLOIDAL COPPER

Colloidal copper is, of course, composed of extremely fine particles, suspended in electrically charged distilled water. It is 100% bio-available. The chemical symbol for copper is Cu, atomic number is 29, and atomic weight 63.5. Copper is very interesting. There are a whole series of diseases that are caused by a copper deficiency.

A deficiency of copper can result in gray hair, skin wrinkles including crow's feet, varicose veins, and saggy skin. Colloidal copper is touted as being able to return gray hair back to its natural color. It is supposed to improve the elastic fiber in the skin, increasing skin flexibility, acting as an anti-wrinkle agent. Old medical books stated that colloidal copper is effective against parasites. It is also said to strengthen the blood and clean

the arteries. In addition, it is said to be effective against aneurysms. Copper jewelry worn directly on skin has been used for a hundred years or more as a remedy for many ailments, including arthritis. Aside from wearing it, any old methods of copper therapy were applied using ground copper because it's only recently, with the advent of colloidal silver and Gold being manufactured electrically that colloidal copper therapy has been possible. Colloidal copper research is in its infancy. *Use with caution and for experimental purposes only.*

KEY APPLICATIONS

- Anti-Wrinkle Agent
- Increases skin Flexibility
- Blood Strengthenener
- Cleans Arteries
- Helps Crow's Feet
- Decreases Gray Hair
- Helps Arthritis
- Helps varicose veins
- Kills Parasites
- Prevents Aneurysms

COLLOIDAL IRIIDIUM

Colloidal Iridium is also composed of extremely fine particles, suspended in electrically charged distilled water. It is 100% bioavailable. The chemical symbol for Iridium is **Ir**, atomic number is 77, and atomic weight is 192.2. Iridium is found in high concentrations (up to 5%) in the brain. It supports the Limbic System, the emotional and mental center of the brain. It acts as a super conductor, improving electrical and chemical reaction. Iridium increases metabolism up to 40%. Iridium is synergistic with Rhodium (see below). Colloidal Iridium is used in the treatment of the following diseases:

KEY APPLICATIONS

- ♦ Anxiety
- ♦ Depression

- ♦ Hormonal Imbalance
- ♦ Neurological Diseases:
- ♦ Stress
- ♦ Tension

• Parkinson's • Alzheimer's

COLLOIDAL RHODIUM

Rhodium works as a super conductor in the body. The chemical symbol for Rhodium is Rh, its atomic number is 45, atomic weight is 102.9. Colloidal Rhodium passes through the “blood brain-barrier” and is found in high concentrations (over 5%) in the brain. Rhodium relaxes DNA, improves DNA communication with RNA, and repairs damaged or mutated DNA structure. Rhodium increases the white blood count, especially T-count in AIDS patients. Manufacturers for Colloidal Rhodium can be found on the internet. “Liquid Lightning”, as one manufacturer refers to Colloidal Rhodium, is also found in Aloe Vera, Carrots, Slippery Elm, Chaparral, Sheep Sorrel, and Ace Mannon. Colloidal Rhodium is used in treatment of the following:

KEY APPLICATIONS

- ☐ AIDS
- ☐ Brain Disorders
- ☐ Cancer
- ☐ Chemical/Electrical reactions in the body
- ☐ Endocrine System
- ☐ Limbic System
- ☐ Virus, Bacteria & Fungus

MINERALS

You have no doubt heard about or listened to the audio tape, “Dead Doctors Don’t Lie,” by Dr. Joel D. Wallach.¹⁶³ On the tape Dr. Wallach tells us that to be healthy we need 90 nutrients, including 16 vitamins, 60 minerals, trace minerals, 12 essential amino acids, 3 fatty acids, and 7 “Rare Earth” minerals.¹⁶⁴ Rare earth minerals doubled the lifespan in laboratory animals. The body tissues and internal fluids contain varying amounts of minerals and are vital to mental and physical health. Mineral deficiency results in illness. Minerals constitute about five percent of the human body

weight and act as catalysts for many biological reactions, including muscle response, the transmission of messages through the nervous system, digestion, and metabolism. Minerals keep blood and tissue fluids from becoming either too acid or too alkaline and permit other nutrients to pass into the bloodstream.

The actions of minerals are interrelated and often combine with vitamins in order to complete reactions. Minerals are said to be more important than vitamins because the vitamins cannot be utilized unless the minerals are present. There are *seven* “MACROMINERALS”: *Calcium, Chlorine, phosphorus, potassium, magnesium, sodium, and sulphur*. These minerals are present in the body in relatively high amounts, measured in milligrams (mg). Other minerals are considered “TRACE MINERALS,” present in the body tissue in trace or small amounts, measured in micrograms (mcg).¹⁶⁵ These include: *chromium, Cobalt, copper, fluorine, iodine, iron, manganese, molybdenum, nickel, selenium, silicon, strontium, vanadium, and zinc*. These trace elements are essential for the proper function of the body.

Mineral deficiencies can result in illness, which can be checked by the addition of the missing mineral to the diet. Be careful when ingesting colloidal minerals because they many contain high levels of mercury. As mentioned before, if you want to get good colloidal minerals, INVESTIGATE.

CHAPTER 18

HOW TO MAKE A GENERATOR

There exists in every person a place that is free from disease, that never feels pain, that cannot age or die. When you go to this place, limitations which all of us accept, cease to exist. They are not even entertained as a possibility... This is the place called perfect health.

~Deepak Chopra, M.D.

Perfect Health

HOW TO MAKE A GENERATOR

A MACHINE IN EVERY HOME

Although the process of making colloidal silver has been reported as being “tedious, time consuming, and expensive,” there are now machines on the market that make the manufacturing process simple, easy, and economical. To manufacture your own colloidal silver, you will need to either make your own or purchase one of the generators on the market. Because the cost of a generator is relatively inexpensive, there is no reason to be without one. If you feel mechanically inclined, this chapter will show you how to make a great, inexpensive machine.

27 VOLTS – 36 VOLTS

The generator described in this chapter is based on Dr. Bob Beck's^{[166](#)} *low voltage, low amperage, direct current* unit. For this unit we'll be using either three 9-volt batteries for a total of 27 volts, or four 9-volt batteries for a total of 36 volts. According to Dr. Bob Beck,^{[167](#)} the very best voltage for the reaction is 30 volts, because the electrodes run the cleanest at this voltage. If you have a small power supply, set it for 30 volts. If you are running on batteries, it is best to start at 36 volts (three 12 volt batteries or four 9 volt batteries) and let the batteries drain down from there. Holding the silver electrodes at a uniform distance away from each other (from 3/8” to 2”) yields a better product.

SUPPLIES NEEDED

All of the supplies listed below can easily be found at the local hardware store or Radio Shack®. It should cost no more than \$35.00 for all of the supplies required to build a generator, assuming you have the tools, or have access to them. It is more cost effective, to build more than one unit at a time. The generators make great gifts.

It should take less than an hour to assemble one unit. If you make more than one, and do it in an assembly line, you should be able to make three units in less than an hour. Of course, once you get the hang of it, the process goes pretty fast.

Unfortunately, the cost of silver has gone up considerably. As of this writing, [168](#) 99.999% silver is up to \$33.99 per ounce USD. Don't skimp on the quality, it will cost you dearly. It is not something to play around with. There are several suppliers listed on the internet, and prices vary. Following is a list of supplies needed to make a Colloidal Silver Generator:

SUPPLY LIST TO MAKE GENERATOR

- One 24v “grain-of-wheat” Incandescent Light Bulb (*40-mA subminiature*) or one LED (*Light Emitting Diode*)
- One 1.3K Resistor [169](#) (*optional - To be used with LED installation only*)
- One Foot of *Three-thirty-second-inch* Heat-shrink Insulation Tubing
- One Foot of *Two-conductor Stranded* Insulated Wire for Clip-Leads
- One Small Box or “Project case” to Put Unit In
- Two Insulated Alligator Clips
- Three or four 9-volt Batteries
- Three or four Battery Snap-on Lead Connectors
- Electrical tape (optional)
- Krazy Glue®
- Two 99.9+% Silver Wires - 4”—10” *each* (*No.12-14 gauge*)

- Solder
- Soldering gun
- Screwdriver
- Hand Drill
- Hair Dryer or Heat Gun
- Double Stick Tape

DIRECTIONS FOR BUILDING A CS UNIT

STEP One: Drill three small holes –*one ¼” and two 1/16”* –at one end of the **project case** – *one for each lead, and one for the light bulb.* ●●● Put the ¼” hole in the middle.

STEP Two: Tape the **three (or four) batteries** together with electrical tape. This is optional, but the tape helps keep the batteries together while working with them.

STEP Three: Cut the battery clip wires to 2 ½”, and strip ¼” plastic off each end. **Solder** the three (or four) **snap-on battery clips** in series (red to black). Make sure they’re all going in the same direction.

STEP Four: Attach the three or four **9v batteries** to the clips (making 27 or 36 volts) and secure into the project box with **double stick tape**. On the last battery clip lead (red), solder a hook and lead wire

STEP Five: Place the 24v **incandescent light bulb** into the ¼” hole in the **project case**. Hold in place with Krazy Glue®. If you bought an LED, see directions below.

STEP Six: Place the **red alligator clip lead** through one of the 1/16” holes in the project case. Place the **black alligator clip lead** through the other 1/16” hole in the case. Make sure that the alligator clips are on the **outside** of the case. 😊 Tie a knot about one inch from the end of each lead inside the case so the wire doesn’t pull out through the hole. Make sure the wire is long enough on the outside of the box, approximately 10.”

STEP Six: Strip ¼” of insulation off of each lead wire inside the case. Solder the insulated **red alligator clip lead** to one side of the bulb.¹⁷⁰ Now solder the **red lead from the battery clip** to the *other side* of the bulb. Solder the **black alligator clip lead** to the other side of the **battery**. (The battery lead and the black alligator clip lead are soldered together.) It doesn’t *matter* if it is positive (**red**) or negative (**black**), this is just to simplify it.

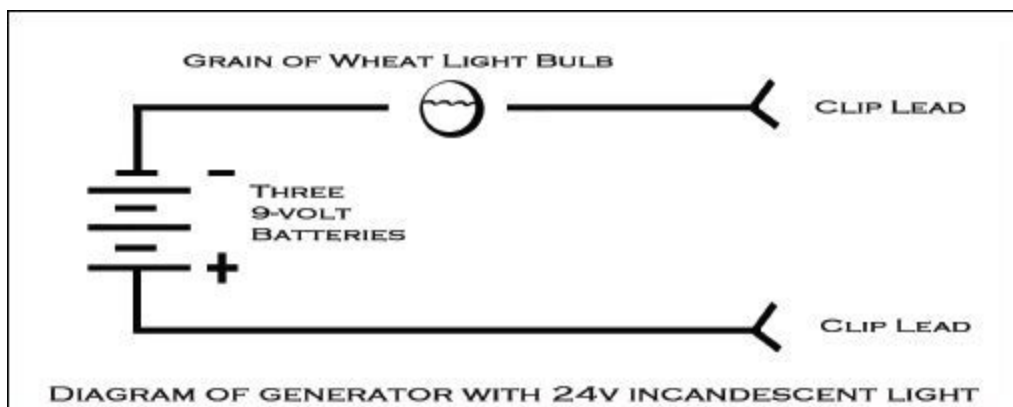
STEP Seven: Cut a 1” length of the heat shrink tubing for each soldered connection, place it over the soldered joints, and shrink the **insulation** using a hair dryer or heat gun. It will hold the soldered connections tightly in place.

STEP Eight: Before putting the box together, you should test the unit by shorting together the two clip leads. The light should light up brightly when you touch the leads together. Pack the box with Styrofoam popcorn and screw on the back. It's ready to use!

STEP Nine: Make sure the 99.999% *silver wire rods* are 4" – 10" long. These are called *silver electrodes*.

STEP Ten: Attach each *alligator clip* to the end of one of the *silver electrode wires*. Now it is ready to go!

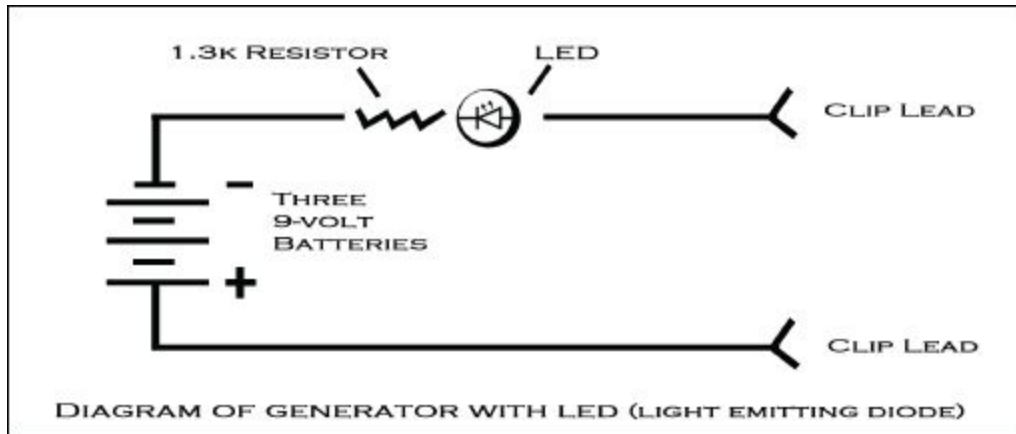
COMMON SCHEMATIC



A well stocked Radio Shack® should have small plastic boxes available for about \$5 - \$10. DON'T USE METAL for the case because of the chance of shorting out the system. There are two items that might be difficult to find. One is the grain-of-wheat 24v light bulb. If Radio Shack doesn't have them in stock, ask them to order one. The other item that can be hard to find is pure silver wire. You can also check with electroplating companies. Jewelers don't usually have pure silver in stock, but some do. They can order it, but you're going to pay premium prices. Remember: Do not use *Sterling silver* because it contains *nickel* which is *toxic!* ☠

DON'T LET THE ALLIGATOR CLIPS TOUCH THE WATER OR YOU WILL HAVE COLLOIDAL CHROME! It's not recommended. The material under the chrome is even worse. If this does accidentally happen, you'll know it. The water will turn an awful rusty chalk color. Throw it out and begin again.

LED SCHEMATIC



DIRECTIONS FOR LED CONSTRUCTION

This system is just a little more complicated. Instead of the grain-of-wheat light bulb, we use the LED (Light Emitting Diode). More care must be exerted in wiring, but not much:

❖ The LED comes with two short leads. The **shortest one** is negative. The **longer lead** is positive.

❖ A 1.3K Ohm resistor must be soldered to the **negative lead** of the LED. The other end of the resistor must be soldered to the **negative lead** of the battery. Be careful with the solder, making sure it doesn't get too hot and short out the resistor.

❖ The **positive lead** of the LED should be soldered to the **negative clip lead** and the **positive lead** of the battery should be soldered to the **positive clip lead**.

HELPFUL HINTS:

To extend the life of the silver rods, change them every time you make a new batch.

◆ REVERSE the silver rods, **end over end**, in their clips.

◆ EXCHANGE the rods, **clip to clip**.

Reversing and exchanging the electrodes will help extend the useful life of the silver. Only a minute amount of silver is used each time a batch of colloidal silver is made. Two rods of silver should make approximately 24

gallons before the rods need to be replaced. The black gunk that collects on the silver rods is *silver oxide* from the oxygen released by the process. It is harmless, but filter it out.

Depending on the amount of use, when the small light on the generator refuses to light up when you short out the probes (touch the rods together) for a second or two, the three 9v. batteries should be replaced. After exchanging the batteries, test the unit by shorting the clip leads. If the light glows, the unit is good and can be put back together.

Good luck with your machine! We want you to be successful. We have no control over how this information is used and do not, of course, take any responsibility nor liability for the use of the colloidal silver generator.

For information about *how to use the machine* to make colloidal silver, turn to Chapter 7 on Apothecary. It gives directions on how to make the sols, as well as how to make stronger concentrations.

CHAPTER 19

TESTIMONIALS

Look to your health; and if you have it, praise God and value it next to a good conscience; for health is the second blessing that we mortals are capable of—a blessing that money cannot buy; therefore value it, and be thankful for it.

~Izaak Walton

PERSONAL EXPERIENCES

These personal experiences were taken from a variety of sources. All sources have been identified as precisely as possible. There has been every care taken to keep information confidential. With permission we used full or partial names, otherwise, we only used initials to maintain confidentiality. We have only given information, such as a town, if we had permission to do so. It is not our intent to invade anyone's personal privacy. The purpose in printing these references is to benefit our readers from other's individual experience.

CAUTIONARY NOTE: Be aware that there is no guarantee that you will experience the same results using CS as the people giving their testimonies. Results are very individualistic. The information herewith is not intended to make any claims as to any specific benefit gained from the use of colloidal silver. The material disclosed in this book is based on research and pharmacological and other records. It is intended for educational and informational purposes only. All healing results are subjective. Benefits of the colloidal silver formula depend upon individual health considerations, as well as metabolic differences. Although anecdotal evidence continues to accumulate as to colloidal silver's efficacy, no claims to cures can be made.

ARTHRITIS

ARTHRITIS

I heard about colloidal silver on short-wave radio. I've been taking it for my arthritis. It has *definitely* helped. ~L.K., CO. (source: Questionnaire)

STIFF RIGHT HAND

I had a stiff right hand -unable to write legibly- and arthritic joints in both hands. Since using colloidal silver, my right hand is 95% free of pain and am able to write again. The joints in my hands are less tender. ~J.K., Palm Coast, FL. (source: Questionnaire)

CLEANSING (Herx) REACTION

ELIMINATING TOXINS

Even though I seemed to be in pretty good health before using colloidal silver, my body went through quite a cleansing reaction after starting on the product. I began to eliminate a lot of mucus. The silver seemed to be helping to rid my body of a lot of toxins that shouldn't be there. ~Dr. Charles W., Ojai, CA (source: Booklet: *Colloidal Silver, The Amazing Alternative to Antibiotics*)

COLDS & FLU

PNEUMONIA

I purchased a CS machine because of a recurring upper respiratory infection in my son, diagnosed by his doctor as pneumonia. [He] did not respond well to conventional antibiotics. The colloidal silver treatment worked. [His] lung problem cleared up after a few doses of silver. With the large amount needed and chronic nature of his ailment we were compelled to seek a more affordable price. Silver works well for all our infectious ailments. We use it on injuries and cuts on ourselves and our animals. We give it to the animals internally as well. It works far better than drug store antibiotics. Without the low cost of this excellent product, we would have to suffer much sickness. ~Allen Amos, Grove, OK (source: Questionnaire)

COMMON COLD

I read about colloidal silver in *Whole Life and Whole Times* articles. I use it to combat the common cold and other diseases it might prevent. It has helped. I don't get colds now! Keep up the good work. The FDA & AMA are NOT about healing, they're about \$\$ for doctors and pharmaceutical

corporation profits. ~Gary Stuart, Santa Monica, CA (source: Questionnaire)

COLDS & FLU

I read about colloidal silver in a medical newsletter by Dr. David Williams called *Alternatives*, Mountain Home Publishing. I work in a large building. Getting the flu and colds were common being around so many people. I do not remember being ill since taking colloidal silver, starting 18 months ago. I would always get at least one cold or the flu every three months without fail. When someone at work or at my son's school was ill, the sickness spread rapidly. I never have a cold or flu anymore. Thanks. ~Robert Rohe, Freeland, MD (source: Questionnaire)

SORE THROAT, COLD, FLU

I heard about colloidal silver at *Agric Health* in Arizona. Cold and flu season was approaching so I wanted colloidal silver on hand. The sore throat, cold, flu, etc. never sets in for any duration when CS is taken while the symptoms are just beginning. I try to drink about 1 ounce, three times a day when I feel a cold, flu, or sore throat coming on. Otherwise, taking the silver is on a sporadic basis.

~John Carlson, Lucan, MN (source: Questionnaire)

FLU

Colloidal silver has stopped the flu before it gets a hold on me. I can feel it coming in my bones. They start to ache. ~Larry M., Tacoma, WA (source: Questionnaire)

SINUS INFECTION

SINUS

I heard about Colloidal silver through health magazines. I've been using colloidal silver in a Neti Pot for a sinus infection. It has helped me very much. ~Ted V., Riverton, WY (source: Questionnaire).

SINUS

I use colloidal silver for sinus infection. I am allergic to many antibiotics, this product is great and costs are in my budget. I am a nurse and exposed to

many diseases. Colloidal silver is good preventative medicine. ~P.B., WA
(source: Questionnaire)

SORE THROAT

SORE THROAT

I have used colloidal silver for sore throats and sinus infections. It has helped me very much so. No sore throats or colds this past winter *at all*. First time in 55 years. No respiratory problems *whatsoever*. ~A. Richard E., West Los Angeles, CA (source: Questionnaire)

SORE THROAT

I use colloidal silver for a sore throat. It helped reduce the sore throat. I no longer take antibiotics. ~Stan B., Sherwood, OR (source: Questionnaire)

VIRAL INFECTION

VIRAL INFECTION

I'm a waitress and someone up here gave me a bottle of colloidal silver after I was told by my doctor that I had a serious viral infection. I used the product and went back to my doctor. He couldn't believe it. I'm living proof. I know it helped save my life.

~Valerie G., North Dakota (source: Booklet: *Colloidal Silver, The Amazing Alternative to Antibiotics*)

DENTAL PROBLEMS

GUM DISEASE

I have had a gum disease for the past 5 years and have had a standing appointment with my hygienist every two weeks for the past year and a half. Before my last appointment I decided to try liquid silver on my gums. I rubbed a little on each morning and night when I brushed my teeth, and immediately I noticed the redness was going away. After two weeks of treating my gums in this manner, I had my appointment with the hygienist. When she saw my gums, she asked me what I had done to them. I told her I had been using Liquid Silver and how I was using it. She wanted to know more about it. I asked why, and she told me that the gum disease was almost gone and she would like to show the dentist and recommend it to their other

patients. Since then, I have used it on sore throats, my son's ear infection, coughs, and anything else that gives me a problem. ~Jeanne M., CA.
(source: *Nature's Silver Solution* newsletter)

PLAQUE

I've noticed that one of the added benefits of using colloidal silver is that it gets rid of plaque! What a great advantage! I've used vinegar to get rid of plaque, but always had to be cautious so that I didn't ruin the enamel, but with colloidal silver, there is no worry about my tooth enamel. ~D.E., Riverside, CA (source: Questionnaire)

Author's Note: *Be aware, colloidal silver will stain a porcelain sink with repeated use!*

TOOTH ABSCESS

I heard about colloidal silver from a friend. I like the many benefits of CS. It has healed a tooth abscess without antibiotics, and an eye-infection, and has helped me with colds, sore throats. Colloidal silver works on viruses while antibiotics don't. My daughter uses it for her little ones when they have colds or viruses. It really works.
~L. H., NY. (source: Questionnaire)

EYE INFECTION

CONJUNCTIVITIS

I've used Colloidal silver for treating conjunctivitis. Not only did it clear it up quickly, but it didn't burn or sting the eyes. ~Dr. Iris A., CO (source: Booklet: *Colloidal Silver, The Amazing Alternative to Antibiotics*)

PINK EYE

One of my sons had pink eye. I had some colloidal silver on hand and decided to use it in his eye. I am not kidding you, the infection was gone *over night!* I saved a trip to the doctor's office and the expense of a prescription drug. This stuff is *great*. ~Donna Ingoglia, Prescott Valley, AZ (source: via telephone)

CONJUNCTIVITIS

I was on The Pirates of the Caribbean ride at Disneyland® and the water splashed into both of my eyes. The next morning both of my eyes were

swollen and full of pus. The doctor said he couldn't help me because it was a viral infection. I used colloidal silver, and it cleared up the infection over night! It didn't kill the virus right away, so I had to use the colloidal silver for two weeks, but the infection was gone! If I didn't use the colloidal silver, the infection came back. What a blessing. ~K.B., California (source: Questionnaire)

EYE INFECTION

I have had an eye infection off and on for several years. A few months ago, it became quite chronic and very painful. I went to a highly recommended eye clinic in California and met with three different doctors. They tried a variety of medications to treat the infection, but it just got worse. After a few months, a small ulcer began to appear, and the pain became almost unbearable. The doctors told me that if the condition continued, I would most likely lose my eye.

At this point, I began to panic and thought, what do I have to lose? I applied colloidal silver to my eye in a small eye cup. The pain was horrible the first treatment¹, but I used it full strength. The second treatment I diluted [the CS] four to one, and there was considerably less pain. The next morning, the redness was gone, the infection was gone, and the ulcer began to heal. I have not had problems since. ~Sandy M., CA (source: *Nature's Silver Solution* newsletter)

EYE INFECTION

I've been using colloidal silver for eye infections. I've gotten very good results. It works better than antibiotics or Echinacea or Goldenseal to keep eye infections away. They're caused by my wife's Parkinson's as she doesn't blink much and is prone to eye trouble.

~Don A. Maure, Grandview, WA (source: Questionnaire)

STYE / EAR INFECTION / WART

I bought colloidal silver for its antibiotic properties. It cured a stye overnight - cured an ear infection, cured a wart completely. ~F.F., VA (source: Questionnaire)

IMMUNE DEFICIENCY

DEPRESSED IMMUNE SYSTEM

Starting with rheumatic fever at the age of 10, I have needed antibiotics throughout my life. I have not had a prescription for antibiotics since obtaining my Colloidal silver Factory [LVDC unit]. I started taking Colloidal silver for my lack of immunity to infections. Has it worked for me? Emphatically, yes. My silver generator is an indispensable part of my life. ~L.G.B., Las Vegas, NV (source: Questionnaire)

IMMUNE COMPROMISED

We have had instant success with colloidal silver and immune compromised patients. A few examples are: Pink Eye (topical) totally are solved in less than six hours; recurrent sinus infections (oral ingestion) resolved in eight days; acute cuticle infections - (topical) - twenty four hours. Another major area in which we have improved our clinical results is in the area of bowel detoxification and dialysis.

The CS has provided excellent removal of abnormal intestinal bacteria; also it has proved to be a great adjunct to our Candida Albicans, Epstein Barr virus, and Chronic Fatigue Syndrome protocols. ~Dr. Evan M., Kansas (source: Booklet: *Colloidal Silver, The Amazing Alternative to Antibiotics*)

PARASITES

PARASITES

I couldn't get rid of the parasites I kept getting every time I went to Mexico or Guatemala. I tried conventional and non-conventional treatments but nothing seemed to work. It was totally amazing how quickly the colloidal silver killed a large percentage of those parasites. I am a convert! ~Audrey S., Los Angeles, CA (source: Booklet: *Colloidal silver, The Amazing Alternative to Antibiotics*)

PREVENTION

NOSE, EARS, ORAL DOSE

Colloidal silver is really helping our family. My husband and I use it every day in the ears and nose and we take a good oral dose. In this day and age we really need it to help ourselves keep out of you know where. ~Ginny L., Washington, D.C. (source: Booklet: *Colloidal Silver, The Amazing Alternative to Antibiotics*)

SKIN PROBLEMS

ACNE

My son had a bad case of acne. We tried everything on the market to help it heal, but nothing available worked. Then we tried colloidal silver. My son began putting the CS on his face morning and night. Within a week the acne started to disappear. His skin is beautiful now. You would never know that he ever had a skin problem.

~Donna I., Prescott Valley, AZ (source: via telephone)

ULCERATED SORE

A 65 year old diabetic cut himself on the leg. He washed and bandaged it, but as often happens with diabetes, the pain persisted, and the cut grew into a sore. Soon it became bigger than the bandage, and he had to apply a dressing. Still, it grew bigger and ugly. In desperation he went to a clinic. His sore was diagnosed as a *stasis ulcer*. For a year, one treatment after another was tried. Nothing, including penicillin and sulfonamide, could heal the ulcer. If his condition had continued unchecked, his leg probably would have been amputated. But finally he was referred to a clinic that treated skin ulcers with a new silver compound. This promptly stopped growth of all bacteria. In less than two months, the ulcer was completely healed.

~Science Digest, March 1978.

STAPH INFECTION

I was having some congestion problems so I went to see a practitioner. The tests revealed that I had some kind of staph infection. After three weeks of using the CS I went back to my practitioner. He could not find a trace of the infection. My energy level has returned to normal and I no longer have that compulsive nose blowing and sneezing. ~Michael H., Marina Del Rey, CA (source: Booklet: *Colloidal Silver, The Amazing Alternative to Antibiotics*)

AGE SPOTS, BLACK SKIN SPOTS, BLEMISHES

I use CS for Black skin spots and brown age spots and other blemishes - nearly all gone in 4 months. I also take 1 Tbsp. upon rising and mix 1 Tbsp. to 1 gallon of water to sip during the day. I used colloidal silver on cyst in reproductive tract. Over 1/2 size reduction in 8 months usage. After using C.S. almost all pain left my body immediately. Was 2 or 3 days before I realized it. Poured [CS] on cuts & scar tissue. Heals cuts, bruises, bee

stings, insect bites, softens scar tissue & can scrape off. Friend's high blood pressure went down. 3-weeks flu gone in 5 days. ~D.O., TX (source: Questionnaire)

COLD SORES & MORE

Colloidal silver helped us so much, but could not afford the high cost of buying it. The Silver Factory [LVDC unit] solved that problem. It has helped in many ways: wonderful for cold sores. The minute you feel one, soak it and forget it. It's gone. Warts: soak a cotton ball with C.S., put on wart with bandage, repeat for 2 days. Clears up colds on the spot! The trick is to take a spoonful straight whenever you've been near someone with a cold! Underarm rash cleared up with C.S. Also stopped odor - use it now for deodorant! Great! It's great for cankers, and as a gargle. Use as a splash on face after a shower. ~E.P., UT (source: Questionnaire)

CUTS & WOUNDS

A few weeks ago while doing dishes, I wasn't paying attention and shoved my hand in the sink full of suds to grab a cup and gashed my index finger with a very sharp knife. The wound was very deep and close to my bone. The knife was dirty and had been used to cup up raw meat. The situation screamed infection. I made a batch of 80 ppm CS and soaked my finger in it for about 10-15 minutes, then I bandaged it. I changed the bandage three times in 2 days, and by the third day the wound was almost fully healed. Whenever I changed the bandage, I would soak my finger in 80 ppm CS. I had no pain and absolutely no swelling. Normally cuts that severe on me usually takes a couple of weeks to heal properly. This cut healed in 3 days. I was amazed at the recovery speed.

~V.C. (source: colloidal-silver.com customer comments)

SKIN INFECTION

I have been having unexplained sores pop up on my body for many, many years and the brilliant doctors didn't have a clue. Nothing showed up in all the tests they performed, and I paid for. I received a commercial advertisement for CS espousing the benefits and immediately purchased a 16 oz. bottle from my local health food store, and began ingesting it and putting it on the sores. Within days, the sores were completely cleared and dried up and NO MORE HAVE SHOWED UP! My body is clear for the

first time in over ten years. Thank God, literally, for colloidal silver. ~T.W
(source: colloidal-silver.com customer comments)

STOMACH ULCER

STOMACH ULCER

I have been taking a shot glass of CS in the morning and one in the evening for at least a year now. And though I have had ulcers four times in my life, and my doctor told me I would have to take pills for the rest of my life, I took none of them. I have had no stomach problems since. Quite often I take enzymes and acidophilus, though many of the people that I know to be taking silver every day do not seem to know much about these two products. ~C.C. (source: via email)

VIRUSES

HERPES

I have given colloidal silver to several people I know who have been ill. In one case the CS got rid of herpes. Another friend who has an immune deficiency disease is doing so much better. He is taking other natural products too but I believe the CS is really helping him a lot. ~Gayle J., Fair Oaks, CA (source: Booklet: *Colloidal Silver, The Amazing Alternative to Antibiotics*)

HIV/AIDS

I am a 46 year old male. I have been infected with the HIV virus since 1987, and I have had full-blown AIDS since October of 1990. I have had a lot of complications, but perhaps the worst was very severe joint pain and neuropathy in my right leg to the knee. I had to walk with a cane to keep my stability in walking. In August of 1994, I was visiting a friend in Seattle and was thankfully introduced to a product called Colloidal silver.

Within a week of taking only 1/4 teaspoon twice a day, my joint pain was gone and the neuropathy began to disappear. I live in Miami, and when I left Seattle it was 52 degrees, and within six hours I returned not only to 89 degree weather, but also to a roommate with the worst cold of the year. Not only was I faced with colds and flu at home, but also at the office. I thought I escaped the colds, but within a week it hit me.

I switched my Liquid Silver dosage to one teaspoon twice a day. Within 36 hours, the cold was gone. This was the first time in seven years I have had a cold stay with me for less than three weeks. When I began the Liquid Silver, my T-cell count was 96. I have my T-cells checked once a month. The first month they went up 16, the second month 25, and the third month 26. This count just keeps gradually going up. I hope this works the same way for other HIV or cancer patients –IT’S A MIRACLE. Thank you.
~L.Lund, Miami, FL (source: Nature’s Silver Solution Newsletter)

ANIMAL TESTIMONIALS

ABSCESS

My cat had an abscess on her head for over two years and nothing I tried helped her. I remembered hearing about Colloidal silver and got some from a friend. I put CS on my cat’s abscess and also in her drinking water. The abscess was gone in *two weeks* time! She is doing fine and there is no sign of any abscess. ~Moni N., AZ (source: directly, via telephone)

GASTRITIS

I used Colloidal silver for gastritis in my pet and in my own case. To answer the Big Question...Yes, using C.S. did help. ~Alexander W., Harlingen, TX (source: Questionnaire)

GUM DISEASE

I take care of primates. Last week I received a new group of apes, and they all had terribly infected gums. I started to brush their teeth with colloidal silver. Within a week, all of the apes have recovered from their infected gums! I am so amazed. It is like a miracle!
~Northern California (Source: phone call)

MANGE & MORE

I have cured pigs and dogs with internal and external doses. I bathe [the animals] in 1 Tbsp. to 1 gallon well water. I Poured mix 3 times on dog to heal mange. ~D.O., TX (source: Questionnaire)

EPM – Equine Protozoa Myeloencephalitis

I show Arabians, and am painstakingly fussy about making sure my horses stay healthy. I had a mare with EPM, which is very difficult to treat, and she

was cured with colloidal silver! I gave her 2 cups of 8-12 ppm a day for six months. She is healed, and I am SOLD! Most people on the equine website use CS. (their website is www.equinesolutionsnetwork.org) They have even used it to treat Lyme disease and West Nile Virus in people, horses, and dogs. Did you know that it will even out and give you a more stable blood sugar? I cannot tell you how happy this makes me. The whole equine world should know about this! ~A.H., Oregon (Source: Questionnaire)

And lastly, keep this in mind:

Believe nothing because a wise man said it,

Believe nothing because it is generally held.

Believe nothing because it is written.

Believe nothing because it is said to be divine.

Believe nothing because someone else believes it.

But believe only what you yourself judge to be true.

~The Buddha

Live Well Laugh Often Love Much

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¹ www.bobbeck.com

² <http://silver-lightning.com/>

³ www.silverlist.org - an email discussion group about colloidal silver: The silverlist@eskimo.com

⁴ www.silvermedicine.org

¹ www.earthpulse.net/Becker.htm

⁵ The Body Electric: Electromagnetism And The Foundation Of Life, by Robert O. Becker and Gary Selden, published by William Morrow and Company, Inc., 1985.

⁶ See CHAPTER 13 “Colloidal Minerals” in *Colloids In Motion*.

⁷ See CHAPTER 10, *FDA News & Blues*.

⁸ in his book (page 167), *The Body Electric*

⁹ www.mercola.com

¹⁰ <http://www.csfacts.com/pages/sarsnews.html>

¹¹ www.silvermedicine.org

¹² <http://group.bmj.com/group/advertising/portfolio/bmj-editions>

¹³ See CHAPTER 6, *Side Effects*.

¹⁴ www.apacure.com

¹⁵ see The Body Electric: Electromagnetism And The Foundation Of Life, by Robert O. Becker and Gary Selden, published by William Morrow and Company, Inc., 1985.

¹⁶ Our Mightiest Germ Fighter, by Jim Powell

¹⁷ www.sciencedigest.org

¹⁸ The number 650 was established by FDA in the 1930's; CS use on illnesses already established, justifiable, verifiable, so the actual number might be much higher.

¹⁹ <http://ecands.net/pdf/resources/silverhh.pdf>

²⁰ www.silvermedicine.org/argyria.html

²¹ www.brookhaveninstruments.com/

²² <http://www.nanobiosilver.com/applications.html>

²³ *The Real Facts on Colloidal Silver*, by Marshall Dudley

²⁴ ONLY an ultrasonic humidifier should be used. Many humidifiers boil the water, leaving the silver behind, and plasticizers can leach out when first used, causing horrible asthma in patients when breathing in the vapors.

²⁵ www.merckmanuals.com/professional

²⁶ “See Me, Feel Me, Touch Me, Heal Me” by George Howe Colt, LIFE Magazine, September 1996

²⁷ Total Wellness by Joseph Pizzorno, N.D., see bibliography

²⁸ N.D. stands for doctor of naturopathy

- ²⁹ From Colloidal Silver - The Antibiotic Alternative by Lloyd Michael Canty and Zane Baranowski, C.N.
- ³⁰ From the information sheet *Colloidal Silver - The Ultimate Antibiotic*.
- ³¹ From Colloidal Silver - The Amazing Alternative To Antibiotics by The Association for Advanced Colloid Research.
- ³² “Colloidal Silver Toxicity – How Much is Harmful?” www.clspress.com/tox.html
- ³³ www.bobbeck.com
- ³⁴ The Beck zapper outputs around 27 volts AC (approx. 50 v peak to peak) ~4 Hz square wave. The current flows through the skin at over 100 microamps to penetrate the blood vessels and damage pathogens.
- ³⁵ Bubonic Plague, Anthrax, HIV/AIDS, Epstein-Barre, hepatitis, herpes, cancer, etc.
- ³⁶ some suggest up to 32 ounces.
- ³⁷ As per Dr. Victor Marcial-Vega / www.marcialvegamd.com
- ³⁸ www.bobbeck.com, and see Chapter 5 *Dosage & Treatment*, pg.39.
- ³⁹ See “Silver Ion Therapy for HIV/AIDS and Septicemia,” by Dr. Charles D. Beal, M.D.
- ⁴⁰ <http://cancerfighter.wordpress.com/category/dmsol/>
- ⁴¹ See <http://www.silvermedicine.org/airbrushoxygennebulizer.html>
- ⁴² “Silver Ion Therapy for HIV/AIDS and Septicemia,” by Dr. Charles D. Beal, M.D. – see article at www.mail-archive.com/silverlist@eskimo.com/msg16144.html
- ⁴³ www.mercola.com
- ⁴⁴ The effect you see when you shine a laser pointer through the liquid.
- ⁴⁵ Over time, this 2 atom colloidal particle can end up being converted back to silver oxide and silver hydroxide, and so forth.
- ⁴⁶ If you have a strong Tyndall from large particles, it will decrease, and if you have a weak or no Tyndall, it will increase with the formation of the 2 atom particle.
- ⁴⁷ www.silvermedicine.org
- ⁴⁸ The information on H2O2 and Gatorade ® is due to Marshall Dudley, “Colloidal Silver Facts” – used by permission.
- ⁴⁹ A colema is a high enema as discussed in Tissue Cleansing Through Bowel Management by Bernard Jensen, D.C and Silvia Bell, Published by Bernard Jensen, D.C., Escondido, CA, 1981.
- ⁵⁰ See John Hills, “Colloidal Silver, A Literature Review.”
- ⁵¹ www.custom-meds.com; 4351 Pacific St., Rocklin, CA 95677, 916-630-4960
- ⁵² www.mail-archive.com/silver-list@eskimo.com/msg04790.html
- ⁵³ Hydrogen Peroxide is an oxidizing bleach. If absorbed into the bloodstream, it increases the level of oxygen, destroying microbes of all kinds on contact.
- ⁵⁴ Author of *The Library of Medical Lies* / <http://www.drdauidwilliams.com/legacy/order/pdf/unabridged-lib-med-lies.pdf>

⁵⁵ <http://educate-yourself.org/cancer/benefitsofhydrogenperoxide17jul03.shtml>

⁵⁶ See CHAPTER 11 *Healing Waters*.

⁵⁷ *Colloidal Silver - Nature's Antibiotic*, Laver Line, 1994.

⁵⁸ Merriam Webster's Collegiate Dictionary, Tenth Edition, 1993.

⁵⁹ Published by Bio Health Enterprises, Inc., P.O. Box 628, Murray Hills, KY, 1989.

⁶⁰ Originally used to describe symptoms of a spirochetal disease (ie: Lyme disease, syphilis, or relapsing fever) occurring in patients when treated with spirocheticidal drugs. Named after Adolf Jarisch, (1850-1902), Austrian dermatologist, and Karl Herxheimer, (1861-1944), German dermatologist.

⁶¹ Toxicity for SILVER - <http://rish.Isd.oml.gov/tox/profiles/silver f V1.him>

⁶² www.silvermedicine.org

⁶³ for more information on fluoride, see www.fluoridealert.org/

⁶⁴ <http://www.fluoridealert.org/50-reasons.htm> articles.mercola.com/sites/articles/.../12/.../paul-connett-fluoride.aspx www.naturalnews.com/fluoride.html
www.nofluoride.com/scientific_studies.cfm

⁶⁵ *Colloidal Silver - The Antibiotic Alternative*, by Lloyd Michael Canty and Zane Baranowski, C.N.

⁶⁶ Marshall Dudley

⁶⁷ www.emofree.com/

⁶⁸ www.mercola.com

⁶⁹ www.chemicalinjury.net

⁷⁰ <http://www.eytonsearth.org/forum/about7.html>

⁷¹ www.silvermedicine.org / <http://www.eytonsearth.org/forum/about7.html> Please note that EIS is still the recommended protocol, not silver chloride.

⁷² Check out Redmond RealSalt, www.herbspro.com/RedmondRealSalt.htm

⁷³ www.miracleii.com

⁷⁴ <http://www.helpyourautisticchild.com/clathration>

⁷⁵ Means having a chemical *valence* (the capacity to unite, react, or interact) of two; bonded to two other atoms or groups.

⁷⁶ The information provided here regarding the nutrients used to detoxify the body comes from *The Toxic Time Bomb* by Sam Ziff, published by Thorsons Publishing Group.

⁷⁷ Thanks due to Bob Berger

⁷⁸ See Environmental Protection Compendium Ambient Water Quality Criteria for Silver @ <http://www.env.gov.bc.ca/wat/wq/BCguidelines/silver/silver.html>

⁷⁹ "Use of Colloids in Health and Disease," by Dr. Henry Crooks

⁸⁰ "Sol" is short for hydrosol, which is a technical term in chemistry for a liquid colloidal dispersion.

⁸¹ An inactive substance that serves as the vehicle or medium for a drug or other active substance.

- ⁸² Oxycodone (Oxycotin), methadone, hydrocodone (Vicodin)
- ⁸³ “FDA to limit acetaminophen in prescription drugs.” By Andrew Zajac, Washing Bureau.
<http://articles.latimes.com/2011/jan/14/nation/la-na-fda-drug-20110114>
- ⁸⁴ except penicillin which had been known for centuries as an *old wives’ tale* because it grew on bread, but women used the moldy bread medicinally.
- ⁸⁵ http://en.wikipedia.org/wiki/Robert_S._Mendelsohn
- ⁸⁶ www.lef.org/magazine/mag2011/mag2011_11.htm#news-menu
- ⁸⁷ *Confessions of a Medical Heretic*, by Dr. Robert S. Mendelsohn
- ⁸⁸ www.nader.org
- ⁸⁹ Audio Tape, “Dead Doctors Don’t Lie” by Joel D. Wallach.
- ⁹⁰ “Banishing Disease With Three 9-Volt Batteries,” Mark Metcalf, Perceptions Magazine, November/December 1995.
- ⁹¹ For more information about the Gulf War Syndrome, order CONTACT -The Phoenix Project-A New Republic newsletter, CONTACT, P.O. Box 27800, Las Vegas, NV 89126. To order a Phoenix Journals catalog, call them at 800/ 800-5565. And see, <http://www.gulfwarvets.com/article.htm>
- ⁹² See article, “Serious Trouble Afoot! As Elite Begin to Unleash Horrible Man-Made Diseases.”
www.phoenixarchives.com/contact/index-1995.html
- ⁹³ See CHAPTER 17, *Liquid Magic* - Silver, Gold & Copper.
- ⁹⁴ www.wallachonline.com/
- ⁹⁵ <http://www.ncbi.nlm.nih.gov/pmc/journals/183/>
- ⁹⁶ Dr. Surowitz’s audio tape, “Colloidal Silver - The most powerful non-toxic antibiotic available anywhere”, 1995, is very interesting.
- ⁹⁷ A grandfather clause is “a clause creating an exemption based on circumstances previously existing.” (Webster’s Collegiate Dictionary)
- ⁹⁸ Over the Counter
- ⁹⁹ www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?fr=310.548
- ¹⁰⁰ As per FDA guidelines, for commercial use, Colloidal Silver must be manufactured with high voltage, low amperage current. Most home use generators are low voltage, low current.
- ¹⁰¹ www.thesilverinstitute.org
- ¹⁰² <http://ngm.nationalgeographic.com/2011/11/iceman-autopsy/hall-text>
- ¹⁰³ www.elixa.com/silver/lindmn.htm
- ¹⁰⁴ www.christopherpublications.com/Banik_Choice_Clear.html
- ¹⁰⁵ www.colloidalsilver.com
- ¹⁰⁶ *Messages from Water*, Masaru Emoto / I.H.M. General Research Institute, HADO Publishing, 1999
- ¹⁰⁷ www.phisciences.com/about_dr_flanagan.html

- ¹⁰⁸ See Chapter 13, Colloids in Motion
- ¹⁰⁹ www.env.gov.bc.ca/epd/cpr/criteria/awqcfs.html
- ¹¹⁰ <http://ecands.net/pdf/resources/silverhh.pdf>
- ¹¹¹ The Body Electric: Electromagnetism And The Foundation Of Life, by Robert O. Becker and Gary Selden, published by William Morrow and Company, Inc., 1985.
- ¹¹² A chemical bond between atoms by the sharing of electrons.
- ¹¹³ Rare book, available on Amazon.com
- ¹¹⁴ Dr. Clark said a positive voltage applied anywhere on the body attracts negatively charged pathogens. Check out Dr. Clark's book, it's very interesting. She was a remarkable scientist who has yet to receive the acknowledgment or honor she deserves.
- ¹¹⁵ www.gezondheidinbalans.nl/www/inst_clmr.html
- ¹¹⁶ See Colloidal Silver - The Amazing Alternative To Antibiotics by the Association for Advanced Colloid Research, 1994.
- ¹¹⁷ See above, and The Story of Trace Minerals by Dr. Melchoir Dijkers.
- ¹¹⁸ The Grind method produces particles usually no finer than 4/1000 of an inch.
- ¹¹⁹ Secrets of the Soil, by Peter Tompkins & Christopher Bird.
- ¹²⁰ A random movement of particles suspended in liquids or gases resulting from the impact of molecules of the fluid surrounding the particles.
- ¹²¹ See CHAPTER 15 *Methods of Production*, Grind Method.
- ¹²² Secrets of the Soil by Peter Tompkins & Christopher Bird.
- ¹²³ www.azomite.com
- ¹²⁴ See SONNE's No.7 bottle, sold at Health Food Stores, SONNE'S ORGANIC FOODS, INC., Kansas City, Missouri, 64142.
- ¹²⁵ See CHAPTER 16, *Silver Mana History*
- ¹²⁶ Rare, out of print, book
- ¹²⁷ Information received via radio program interview with Dr. Hal Huggins, December 5, 1996 on Excellent Radio 88.9 FM, Grover Beach, CA. See "It's All In Your Head," by Dr. Hal A. Huggins.
- ¹²⁸ Colloidal Silver, The Antibiotic Alternative, Lloyd M. Canty and Zane Baranowski.
- ¹²⁹ www.ColloidalScienceLab.com
- ¹³⁰ Thanks due to Peter A. Lindemann
- ¹³¹ www.silver-colloids.com/Reports/reports.html
- ¹³² "Silver Ion Therapy for HIV/AIDS and Septicemia," by Dr. Charles D. Beal, M.D. – www.mail-archive.com/silver-list@eskimo.com/msg16144.html
- ¹³³ www.alternativescentral.com/colloidalsilver.htm -and see Thurman, R.B., and Gerba, C.P. (1989). "The Molecular Mechanisms of Copper and Silver Ions Disinfection of Bacteria and Viruses." A paper presented at The First International Conference on Gold and Silver in Medicine.

- ¹³⁴ See “Microclusters,” by Michael A. Duncan and Dennis H. Rouvray, *Scientific American*, Dec. 1989.
- ¹³⁵ By analogy with the quantum model of atomic nuclei in which certain combinations of protons and neutrons are allowed and others are not.
- ¹³⁶ ie: Five atoms in a trigonal bipyramid (with six triangular faces) or nine atoms in a capped, square antiprism (with 12 triangular faces and one square face).
- ¹³⁷ ie: Lead and antimony.
- ¹³⁸ ie: Sodium and potassium.
- ¹³⁹ ie: Copper and Silver.
- ¹⁴⁰ ie: Iron, chromium and nickel.
- ¹⁴¹ See the Proceedings of the First International Conference on Gold and Silver in Medicine, see Bibliography.
- ¹⁴² To take up and hold in a thin layer of molecules on the surface of a solid substance.
- ¹⁴³ See CHAPTER 8, *Quality Liquid*.
- ¹⁴⁴ This is the type of generator that the FDA says must be emulated by those intending to sell their product to the public.
- ¹⁴⁵ Hill, W. R., “Argyria: The Pharmacology of Silver.” Baltimore, Maryland, The Williams and Wilkins Co., 1939.
- ¹⁴⁶ Perhaps the royals were called “blue bloods” because of their bluish tinged skin?
- ¹⁴⁷ See newsletter *Silver Facts*, The Silver Institute, 1112 Sixteenth St., N.W., Washington, D.C. 20036.
- ¹⁴⁸ Trading houses worldwide quote the price of silver and other precious metals in terms of “troy ounces” or *Moz*. One troy ounce equals 1.09714 avoirdupois ounces, or 31.10348 grams. The term *troy* comes from Troyes, France, a major trading city during the Middle Ages.
- ¹⁴⁹ www.ncbi.nlm.nih.gov/pmc/journals/182/
- ¹⁵⁰ See CHAPTER 15, *Methods of Production*.
- ¹⁵¹ With prolonged use of the inferior product manufactured by the grind method or diluted silver nitrate, the silver is accumulated under the skin causing it to turn a sickly grayish color.
- ¹⁵² See more on Silver Nitrate in CHAPTER 6 on *Side Effects*.
- ¹⁵³ *Colloidal Silver, Nature’s Antibiotic*, Laver Line, 1994.
- ¹⁵⁴ *The Body Electric: Electromagnetism And The Foundation Of Life*, by Robert O. Becker and Gary Selden, published by William Morrow and Company, Inc., 1985.
- ¹⁵⁵ They are also authors of *The Secret Life of Plants*
- ¹⁵⁶ www.phisciencies.com
- ¹⁵⁷ http://en.wikipedia.org/wiki/Theodor_Schwenk
- ¹⁵⁸ Some literature showed 1927 as the year rheumatoid arthritis was treated with gold. The year 1929 was quoted in the Proceedings of the First International Conference on Gold and Silver in

Medicine, Bethesda, Maryland, by The Gold Institute and The Silver Institute, 1987.

¹⁵⁹ As of November, 2011, it is \$1,706.00 per ounce.

¹⁶⁰ See CHAPTER 6, *Side Effects*.

¹⁶¹ “Applications and Implications of Gold Therapy” by Arthur Lorber M.D., Director, Arthritis Center, Long Beach, CA, see Gold Institute.

¹⁶² “The Effect of Myochrisine on the chemotaxis of mononuclear cells and its interaction with the “protein kinase C” pathway in platelets. by C.J.L Lock and K.M.S. McKague, see the Gold Institute.

¹⁶³ www.wallachonline.com

¹⁶⁴ Named after Old Testament cities: the Lanthanide series: *Cerium*, *Praseodymium*, *Neodymium*, *Promethium*, *Samarium*, plus the elements *Scandium* and *Yttrium*.

¹⁶⁵ One milligram (mg) equals 1/1000 gram; one microgram equals 1/1000 milligram.

¹⁶⁶ www.bobbeck.com

¹⁶⁷ www.cancertutor.com/Cancer02/BobBeckPaper.pdf

¹⁶⁸ November, 2011

¹⁶⁹ A resistor is a device that has electrical resistance and is used in an electric circuit for protection, operation, or current control.

¹⁷⁰ The bulb is very small and has leads coming out of it. The leads are too long and need to be cut so that they are about six inches long.