Note: The following was taken from the research of The Alternative Medicine Research Foundation, a non profit Charitable Trust, and from www.cat007.com

# **Colloidal Silver-Miracle or Fraud**

#### DOES THE EMPEROR HAVE ANY CLOTHES AT ALL?

A new discovery and you can make your own for less than \$1.00/gallon.

Most of us have read some of the remarkable, frequently outrageous, claims for colloidal silver. Clever marketing scoundrels have made millions pawning off 2 ounces of sublingual spray, on gullible people, for ten to eighty clams. Hundreds of others encourage you to make your own for peanuts . . . provided you purchase their magical generator for \$50.00-\$500.00.

I suspected that this was nothing more than a creative way to sell snake oil . . . similar to the HGH scam. Then it occurred to me that I may be wrong . . . I frequently am (sigh).

In 1999 I learned that the FDA was considering making colloidal silver a prescription item I thought, "Oops, why would they restrict something which, even if it is worthless, is totally benign?". My researchers in The Dominican Republic built a generator. We quickly enlisted (actually conscripted) some mouse volunteers.

I never published the results because they were inconclusive and mostly disappointing. It was very effective on burns and skin infections but showed no efficacy on anything viral. These results have been well know for many years. The research was abandoned.

#### FRANKENSTEIN REVISITED

As you recall in Mary Shelley's nineteenth century fantasy, life was created with a few million volts of electricity (lightning). Now I am wondering if millions of lives can be saved, or enhanced, utilizing the same concept.

Recently I mentioned that I would love to visit Bangkok . . . but not alone (sigh). Last week I was contacted by a very bright Norwegian lady, a highly educated registered nurse who wondered if this SEXagenerian had any promise. We exchanged the usual emails wherein I boasted about how clever, smart, rich, and altogether irresistible I was . . . while she pretended to be impressed.

She is currently in So. California. Finally, she decided that, even though I may be a rogue, I was not a phony. She disclosed her phone number. We had chatted for over an hour when she casually mentioned a Ph.D. friend, a classical "Mad Scientist" type, who had recently passed away. Just prior to his death he gave her a machine which he had developed. He claimed it solved the problem of creating colloidal silver particles small enough to penetrate at the atomic level . . . as small as 10 Angstroms, 1/100th the size of those made by conventional means. Note: suspended particles can be accurately referred to as "colloidal" in diameters of 5-5,000 Angstroms.

She told of many hard to believe results her friends had reported, as well as some of her own. She had no idea how or why it worked where conventional suspensions failed. When she told me how it was applied (there is NO apparent physical connection to the distilled water), and what she saw, I know exactly what was going on.

I called a biophysicist colleague, explaining what I had learned. Years ago Hans, 82, had done some research on colloidal silver; with success only at the bacterial level. The particles were far too large to access a virus which can be up to thousands of times smaller than a bacterium. He suggested that, if indeed this machine produced silver particles in the 20-40 Angstrom area, it would be able to function on the atomic level . . . which translates to, "Maybe, just maybe a key has been found to deal with a virus . . . which has totally baffled medical science.

First read the following. It was taken from many sources which I believe to be reliable.

Using the conventional method one can shine a bright light through the solution and see evidence that it is not plain distilled water for one will see the beam in the water due to a tiny refraction caused by the suspended particles. This machine produces a crystal clear solution, and yet, with a sensitive, digital ohm meter one can verify that something is there.

All this may just be a wild goose chase . . . no matter, we research scientists chase many geese although usually wind up with only a few, if any, feathers (sigh).

### WANNA BE A GUINEA PIG???

Colloidal Silver has been clinically proven to be powerful natural antibiotic, estimated to kill over 650 different disease-causing pathogens (bacteria, viruses, fungus and yeast). Hippo crates, the father of modern medicine, noted that silver had beneficial healing and antidisease properties. Colloidal silver was used widely until around 1938 when the FDA came into being and the movement toward synthetic antibiotics began to emerge. Although used by NASA on shuttle missions it's use has all but disappeared except for hospital intensive burn units. A group of scientists in Pharm World Sci v.19 pp. 197-201 Aug., 1997, refer to colloidal silver as "an antiseptic agent added because of its known antifungal potency." It has also been reported that having silver in the bloodstream increases the healing process of fractured bones. Small amounts of silver have also been used over time to preserve foods. The following is a list of some of the (pre-1938) documented uses of silver, specifically in the colloidal form, for the treatment of various conditions and pathogens:

acne, arthritis, athlete's foot, bladder inflammation, burns, B.Tuberculosis, blepharitis, cancer, colitis, cystitis, diphtheria, dermatitis, diabetes, dysentery, ear infections, Eustachian tubes, eczema, fibrositis, furunculosis, gonorrheal herpes, gonorrhea, impetigo, influenza, intestinal conditions, keratitis, leprosy, leukemia, lupus, lymphagitis, malaria, Menier's symptoms, meningitis, neurasthenia, ophthalmology, canine parvo virus, pneumonia, pleurisy, prostate, Pruritis Ani, quinsiie, rheumatism, ring worm, rhinitis, scarletina, seborrhea, septic ulcers, sepsis, septicemia, skin cancer, shingles, soft sores, spruce, staph infections, strep infections, Subdies inflammation, tuberculosis, tonsillitis, toxemia, typhoid, trench foot, ulcers, warts, whooping cough and yeast infections.

Today we are threatened by more "severe" viruses such as the Ebola and Hanta and other "flesh-eating" bacteria. However, understanding that these are merely viruses and bacteria, silver renders these organisms as ineffective in the disease game as any others. Under a microscope, bacteria which have mutated to the point where they laugh at penicillin are quickly dispatched with a few ions of silver.

#### SO WHAT EXACTLY IS COLLOIDAL SILVER?

Angstrom, named after Jonas Anders, (1814-1874) Sweedish physicist; pioneer in spectroscopy.

A unit of measure equal to 1 hundred-millionth of a centimeter. In everyday terms, a sheet of paper is approximately 1,000,000 angstroms thick. Visible light covers the range from 4,000 to 8,000 angstroms.

Colloidal Silver is defined as a very small particle of silver, 10 to 5,000 Angstroms in diameter, suspended in a different medium, such as a solid in a liquid. It is most commonly produced today by passing an electrical current over a couple of silver electrodes immersed in water. This process forms an electrical current in the liquid medium that generates particles that become suspended in that liquid. Each colloid particle contains approximately 10-5000 silver atoms. The particles are so small that one billion would fit into a cube four one hundredths of an inch in size. Colloidal silver is also an electrical colloid meaning the silver particles, have a positive electrical charge. Because of the small particle size and electrical charge, the particles repel each other and thus theoretically stay suspended in the water indefinitely and do not settle out.

#### HOW IT WORKS...theoretically

Colloidal silver works in several ways. Its very effective anti-microbial properties have resulted in use by doctors for the treatment of AIDS, Cancer, Epstein Barr, Gonorrhea, Lyme's Disease, Candida, fungus, warts and parasites.

In order to understand how colloidal silver works, one must first understand the disease-state of the body. The body encounters pathogens and other foreign entities many times a day. When the body is healthy, it maintains a proper pH and oxygen-rich environment. The pH (parts Hydrogen) inside the cells of the body are usually near an alkaline pH 7.2-7.4. Outside the cell, the fluid surrounding the cells will usually realize an acidic pH near 4.0. However, when an individual does not maintain a healthy environment in the body, the pH begins to rise in the outer fluid and fall inside the cell. This reduces the electrical potential of the cell. The oxygen levels in the body respond by decreasing. Pathogens that grow in the body will usually attack these weakened cells and "set up shop". Organisms that cause illness and attack these weak cells cannot survive in healthy cells that have outer fluid pH below ~4.0 and inner cellular fluid above pH ~6.9. Silver maintains a positive charge which when introduced to areas of infection, disrupt the organisms causing the illness.

Interestingly, colloidal silver kills the pathogens by inhibiting the enzyme(s) that these pathogens utilize to survive in their anaerobic environment. This enzyme(s) is the pathogen's "chemical lung". Without the necessary enzyme(s) for metabolism, growth, regeneration and survival, the pathogens "suffocate" and die. It is believed that viruses are destroyed because the electric valence charge of silver particles cause their protective protein coat, also referred to as the "head", to collapse and are rendered unable to replicate. The cells infected by virus will also be susceptible to enzymatic inhibition. They are then removed from the body by the immune, lymphatic, and intestinal elimination systems. This process is so effective that no pathogen has been recorded to mutate against colloidal silver or live in its presence for more than 6 minutes. While antibiotics are losing their effectiveness, as several strains of germs are

becoming resistant to conventional antibiotics, they are not able to develop any resistant strains or immunity to SILVER.

# TOXICITY - IS COLLOIDAL SILVER SAFE?

Why is there no toxicity? Because the silver is in a colloidal form, any excess that is not needed by the body is easily eliminated thereby preventing the accumulation in body tissues for long periods of time. There is no known interaction between PURE colloidal silver and any drugs, herbs or medicines. Colloidal silver is reported to be non-toxic to the body. No known cases exist demonstrating the ability to overdose using colloidal silver.

# MAKE YOUR CS GENERATOR FOR ABOUT \$10.00

It is so simple. You can make your own colloidal silver for under \$1.00 per gallon!

### SOME BACKGROUND

Several months ago I told wrote of a deceased mad scientist and his "Frankenstein" machine which made colloidal silver utilizing over a million volts of electricity. We had high hopes that perhaps the key had been discovered . . . that is, producing particles in the 10-15 nanometer range. The theory was that particles of this size may effectively deal with a virus . . . which can be 1,000 times smaller than a bacterium. We had a number of commercial CS products analyzed and none even came close . . . being mostly in the 40-300 nanometer range.

We funded in vitro (in a dish) and in vivo (in an animal) studies done by our colleagues in The Dominican Republic. In the in vitro study this CS worked better than conventional prescription antibiotics. It killed the six common pathogens easily while none of the five antibiotics killed all of them. We were thrilled. However, the mouse study, involving melanoma (fatal skin cancer), was, at best, inconclusive. One potentially bright spot was that the five mice receiving topical and oral CS lived almost twice as long as the control group which received no treatment. In addition to the topical and oral treatment, we injected some CS directly into the tumours of three mice daily. Two of these fellows are still alive but the prognosis is not good.

"EVEN BLIND PIGS FIND ACORNS OCCASIONALLY I just love to experiment. One day, just for fun, I hooked up a little 6 volt DC power supply, the same (plug in the socket unit) as one uses to power small electronics. I hooked it to two .9999 pure silver coins and filled a glass with some distilled water from Wallmart (.69/gallon). I wanted to measure current so placed a GE \$9.95 volt/ohm/millimeter (also from Wallmart) in series with one lead. Marsha had just bought a little thing which produces bubbles in her gold fish fish tank . . . oops, she is offended if I refer to her Tropical fish as gold fish. I figured oxygenating the water wouldn't hurt. Besides, the bubbles looked cute.

Conventional wisdom suggests that one needs at least 20 milliamperes (ma) to produce the electrolysis needed to make CS. It looked grim for my experiment for the beginning current was 1/10 of a milliampere of 100 microamps. Four hours later the current had increased to 450 microamperes . . . something was happening. The solution was crystal clear. "Probably a waste of time.", I thought . . . until I examined the solution with a little laser pen, available from most hardware stores for about \$5.00.

WOW! A clear Tyndall effect, named after a Scottish scientist who discovered that shining a bright light through a solution would will reveal a beam . . . if there are any reflective particles there. In this case, they could only be silver. (Shining the laser before the electrolysis revealed no beam at all) I checked the conductivity with a \$40.00 Hanna digital meter. From a beginning 2.1 micro-seimans it was now 13.5. Marketers claim this means parts per million of silver particles . . . which is total rubbish. Drop a silver coin in distilled water. The micro-seimans will not change. However, the Hanna is displaying the relative amount of silver ions . . . which are .23 nanometers in size, a bit smaller than a silver atom because it is missing one electron.

I tasted the solution. A slight metallic taste. Marsha watered some herb seeds which had begun to sprout, but looked droopy. The next day they were erect. Marsha giggled (sadistic wench that she is), "Try it Jon. Maybe it will work for you!".

Hmmmmmm . . . maybe we are on to something. I applied some to a nasty cut on my arm. It healed much faster than expected.

Marsha has an acne problem. Voila! v It seemed to dry them up in a few days. We place a saucer of plain tap water side by side with one containing this CS. The cats were unanimous.....CS was preferred.

I tried it as an underarm deodorant as I know that off-the-shelf stuff is dangerous (more on this another time). After playing some hard tennis I hugged Marsha. Surprised, she observed, "You don't stink Jon!".

### WAS IT REAL OR OUR IMAGINATION?

I decided to blow some more money. I sent a sample to the Colloidal Science Laboratory in Westampton, New Jersey for analysis on their Malvem Zetasizer 300DHS, a \$70,000.00 machine utilizing atomic Photon Correlation Spectroscopy. They publish a wealth of information on CS and have nothing to sell. If you want some advanced technical information visit their site.

The lab results were far better that expected. The silver particles ranged from 10.2-25.7 nanometers in size . . . far better than any others we had analyzed . . . even the Frankenstein process.

# A MILLION DOLLAR METHOD

I mentioned the results to an old friend. Abe, 70, is a multi-millionaire marketing maven (nifty alliteration....heh, heh). "My Gawd Jon, we can make millions from this!", he exclaimed. "Big @#\$% ing deal!", I replied. "We both have far more than we could ever spend." &nbspA las, we have different agendas. Making money rings his bell while I just hope to leave a few tracks behind when I cash in my chips . . . a quest for immortality, according to my Brother, a shrink.

# EVEN DUMMIES CAN MAKE HIGH QUALITY CS

This ain't rocket science so pay attention. Don't email for more information. I haven't the time for hand holding!

\* 1. Buy a 6 volt DC transformer for about 5 clams. Better yet, pick up one at a flea market for .50. The current doesn't matter as this method uses less than one ma.

\* 2. Clip the connector off the end of the wire.

\* 3. Get two alligator clips from Radio Shack for a buck.

\* 4. Carefully separate the two wires. Strip the insulation off for about 1 inch.

\* 5. Connect each lead to the clip.

\* 6. You need two electrodes. Don't waste \$15.00 for 1/4 oz. pieces of silver wire. Go to a any coin store and buy two Canadian Maple Leafs for about \$6.50 ea. Each has 1.2 oz. of .9999 pure silver, enough to make more CS than you will ever use.

\* 7. Buy a gallon of distilled water for about .70.

\* 8. Buy a tiny fish tank bubbler machine for about 8 bucks. They will have the neoprene tubing as well. You will need about two feet.

\* 9. Be sure the coin is squeaky clean. Clamp them to opposite sides of an 8 oz. glass of distilled water.

\* 10. Place the tubing to the bottom of the glass.

\* 11. Fill the glass with distilled water ONLY up to the bottom of the clips. One does not want the metal, from the clips, in contact with the water, only the coins.

\* 12. Plug in the little transformer and oxygenation machine.

\* 13. Run for about five hours.

\* 14. Carefully remove the coins. There will be residue on them and you don't want that in the solution. For even more purity, use the neoprene tubing and siphon the solution into a clean glass/or plastic container. (In these parts a siphon hose is referred to as an "Arkansas credit card".)

\* 15. Keep the CS out of sunlight in an air tight bottle.

\* 16. Clean the coins thoroughly preparing for the next batch.

Now you have high quality CS in about 5 PPM. Some scoundrels claim their CS is 100-800 PPM. This is rubbish. At such concentrations the particles would agglomerate forming much larger particles. Basic chemistry.

Last night I spoke with Frank Key, the scientist who owns the laboratory. He observed, "You have stumbled on to a fine way to make CS." &nbspHe did state that the potency would diminish over time and suggested that one make a new batch every fortnight. Considering that costs you nothing it makes sense.

He said the secret was the low voltage and the fish pump. I thought it was due to more oxygen in the water. He stated it was because of the introduction of carbon dioxide, explaining in chemical terms which were over my head. The fish pump in 100% vital to the process.