

Colloidal Silver Everything You Need to Know

People today are concerned about colloidal silver, its effects on health and potential side effects. Silver, when it reaches the human body produces specific effects. What are the negative effects and what are the positive ones? This article tells you briefly about most aspects of colloidal silver.

What is Colloidal Silver?

Colloidal Silver is basically silver particles suspended in water. These sub-microscopic particles are neither filtered nor deposited at the bottom of the container. Other than silver particles, silver ions (a silver atom with one electron removed and has a positive charge) too can be present in colloidal silver products.

PPM (parts per million) refers to the concentration of the material in a medium. The same number is derived if you find milligrams of silver per liter (mg/l) of water. Thus mg/l and PPM are the same. Different companies sell colloidal silver of different concentrations. The concentration of 20 PPMs has the qualities of fine size particles, uniform suspension and silver particles in ionic state are less than 20% of the total silver content.

The size and concentration of silver particles are variable (1 nm to 1000 nm). The variations are due to different factors including the purity of the silver, purity of the water and the speed of the manufacturing process. The smaller the particle size, the better its performance will be.

Advanced Colloidal Silver Manufacturing Process

The manufacturing of our Advanced Colloidal Silver is accomplished using a proprietary electrolysis process, with silver wire electrodes and distilled water. The silver electrodes used are pure .9999 (99.99%) and the water is local well/spring water from the Edwards Aquifer recharge zone. No salt is added to increase the conductivity of the water and no animal protein is added to keep the silver particles suspended.

Effect of Colloidal Silver on Living System

Colloidal silver has anti-microbial properties, acting as a fungicide, bactericide and virucide (viricide), killing any one-celled microorganism it contacts and preventing the chance of adaptation for anti-silver resistance by the microorganisms. The silver first disables the respiration capacity and affects the metabolism of the unicellular microorganism.

Silver doesn't affect the cytoplasm of multi-cellular organisms. There is a difference in cell structure of sub-microscopic organisms and that of animals and plants. Thus colloidal silver is harmful to single celled microorganisms, but is harmless to plants and animals.

Colloidal silver is used for topical applications in the treatment of bruises and wounds. When used in wounds, colloidal silver acts as an antiseptic and facilitates quick healing.

The Beneficial Effects of Silver

Historically, the wealthy enjoying their meals in vessels of silver and using silver utensils were found to have a greater immune to even epidemics that caused extensive deaths in the less affluent populations.

There are ancient traditions of health that suggest using a silver tongue scrapper for tongue cleaning. Most probably the beneficial effects of silver were identified thousands of years ago. It is possible that tiny particles and ions of silver are absorbed into the bloodstream directly through the tongue, acting as an effective anti-biotic, killing the disease causing microorganisms.

Colloidal Silver and Antibiotics

Research has shown the effects of colloidal silver in killing pathogens like bacteria, fungus and virus. It is estimated that colloidal silver is effective against about 650 pathogens (virus, bacteria, and fungus) while most antibiotics are effective only against a dozen or two pathogens.

Silver is also known to improve the functioning of the lymphatic system, which is responsible for maintenance of the natural immune system of the body.

Colloidal Silver in Acne Treatment

Acne is a common skin condition that is prevalent mainly among teenagers. The disease is characterized by appearance of pustules and cysts in the face and upper body. Body acne affecting the whole body is not uncommon.

Most Acne is caused due to bacterial activity. Effectively controlling the bacteria that cause acne is the effective treatment against acne. Colloidal silver treatment can help by killing bacteria without disturbing normal body tissues. The silver kills bacteria by suffocation. There is no chance of developing anti-silver resistance in bacteria through natural selection. No bacteria can survive direct contact with silver.

Treatment of acne with colloidal silver can effectively include both topical application and oral ingestion.

Other Conditions Treated with Colloidal Silver

Colloidal silver can kill 650 types of microorganisms and most of them are pathogens. It killing pathogens doesn't necessarily mean it is an effective treatment against the diseases. It is however to be noted that the diseases can be brought under control by consumption of colloidal silver alone.

Colloidal silver can also be used in the treatment of athlete's foot, eczema, boils, burns, cuts, wounds and dermatitis. It is also useful in the treatment of internal inflammations like bladder inflammation, cystitis, colitis, conjunctivitis, lupus, ringworm, herpes and many serious diseases and conditions.

Consumption of Colloidal Silver

Many mix colloidal silver in the drinking water. The silver is not digested before being absorbed in the body. The rate of absorption can be increased by holding the water in the mouth for a few seconds. The size of silver particles makes it easy to pass through the lining of digestive tract and directly get absorbed into the bloodstream. The silver particles reach all parts of the body through the blood and kill the pathogens (bacteria and virus) that come in contact with the silver particles.

On the downside, these silver particles can destroy the beneficial bacteria in our digestive tract. It is therefore recommended to take live culture yogurt after two hours of colloidal silver consumption to restore the amount of bacteria in the intestines. There are however claims that beneficial bacteria are not affected by colloidal silver, which is not true. Silver can't differentiate between beneficial bacteria and pathogens. Silver acts on all unicellular organisms.

The unabsorbed silver particles are eliminated from the body along with digestive wastes.

Intake of colloidal silver kills the infectious germs and they are expelled through the excretory organs like the kidneys. It is therefore beneficial to increase the intake of water to flush out the residue of bacteria and virus from the body.

The Optimum Usage Levels of Colloidal Silver

One tsp of 20 PPMs (parts per million) colloidal silver contains about 100 micrograms of silver. Daily intake of 25 to 100 micro grams of colloidal silver is within nutritional level. Amounts higher than these are recommended only under therapeutic conditions.

It is OK to start with 1 to 3 tsp of colloidal silver for a week. People claim to have expelled cold and flu with intake of 12 oz of colloidal silver in the morning and in the evening on the first day of symptoms showing up.

Side Effects – Argyria

Argyria is an irreversible, but extremely rare, health condition characterized by grey or blue-grey skin because of consuming silver. The condition may be reversible using certain Chelation methods, but you should be extremely careful that the colloidal silver you purchase is free of water impurities such as salts or animal proteins.

Researchers have also found that Argyria may not be caused simply to silver, but may be because of compounds like silver nitrate. Most, if not all cases of Argyria in the past have been caused by silver nitrate and most recent cases have been silver in saline solution or ionic silver. This condition has not been documented among people using small particle colloidal silver.

Such cases are identified more with use of silver colloids in protein or gelatin medium. Such thicker than water media are used because the particle size of silver is much bigger than that of (distilled water) colloidal silver. For example, BBs in water will sink to the bottom; BBs in jell-o will stay suspended. Larger sized particles quickly settle in water and are not as effective as finer sized silver particles and do not have the effective surface area as do smaller particles.

Silver can act up on pathogens only when it can come in close contact with the bacteria or virus. Larger silver particles are not able to pass through cell membranes and lining tissues and reach the locations where bacteria and virus are. This inability of the greater sized particles to move quickly across barriers leads to its accumulation in the body, especially under the skin, causing this cosmetic condition. There is also indication that primarily ionic silver for long periods and in very large servings may also be able to cause Argyria.

Tips for Purchasing Colloidal Silver

Colloidal Silver is available through mail order, websites and local stores. There are different things you need to observe while purchasing colloidal silver.

Always make sure to purchase colloidal silver manufactured through electro-colloidal process and not by any chemical activity.

High PPMs (parts per million) rate does not signify higher quality colloidal silver. In fact, it generally is an indicator of an inferior quality and a warning sign if one is concerned about Argyria. The primary thing to look for is the particle size. The smaller the silver particle size, the more efficient the colloidal silver; the greater the particle size, the less the effective the colloidal silver is. (<http://utopiasilver.com/faq/index.htm>)

Make sure only distilled water is used for the production of colloidal silver. Silver can bind to other minerals in a water medium and may either fall out or be more conducive to Argyria.

Particle colloidal silver of 15ppm to 20ppm has dark brown color with greenish undertones. If the product appears very clear, you can be sure that the product has little silver particle content and may be a primarily ionic silver solution. (<http://utopiasilver.com/faq/particle-size.htm>) Milky white appearance suggests formation of silver salts. These silver salts (like silver nitrate and silver chloride) may not be useful for the body and may be more conducive to developing Argyria with heavy use.

Homemade ionic colloidal silver should be stored well in dark or amber bottles. Material like plastic is not good for large particle silver in that it tends to adhere to the plastic. It is however not a major problem for finer quality small particle colloidal silver, which remains inert to UV radiations. The colloidal silver you make at home should also be kept in amber glass jars only.

FDA Stand on Colloidal Silver

The FDA states that it has not approved that colloidal silver has preventive or curative value and are not recognized as safe and effective. The problem being that the FDA has not conducted any testing of colloidal silver, but nor have they tested many things for safety and effectiveness. Additionally, they simply ignore all historical use of and all research done with silver. (http://utopiasilver.com/research_studies.htm)

Actual Uses of Colloidal Silver

Products that contain silver in various forms are used in most clinical establishments in the country. Even the FDA has licensed the use of Silvalon, a patented anti-microbial bandage in treatment of cuts, bruises and wounds. Another product named Contreet Foam, a silver releasing dressing was found to be effective in healing chronic venous leg ulcers as reported by the NIH. The effectiveness of silver-releasing dressings in wound healing is highlighted in the report.

Dilute silver nitrate solution is dripped on to the eyes of new born babies to prevent eye infection from bacteria. And the FDA says that silver is not safe and effective?

Use of colloidal silver in public places – following the successful example set by Hong Kong subways, London and other cities decided to spray colloidal silver disinfectant spray in public places to prevent the spread of flu virus.

Use of Colloidal Silver Before 1938

Colloidal silver was widely and commonly used prior to 1938 and even into the 1990s were listed in Pharmaceutical books. (http://www.utopiasilver.com/medical_doc/Merck%202006.pdf) Colloidal silver was regularly used by Physicians as the antibiotic of choice. Prior to 1938, when patented anti-biotics were developed, colloidal silver was administered orally, intravenously, sprayed into the nose and as eye drops.

Historically, people used silver vessels to keep milk fresh for longer periods, even using silver coins in milk.

The electro-colloidal process manufacturing process was the process of choice prior to 1938 and is still the best method of producing colloidal silver.

Controversies Surrounding Colloidal Silver

Colloidal silver's anti-pathogenic effect doesn't translate into curing any disease. Colloidal silver simply kills the pathogens/one-celled organisms that cause illness. Colloidal silver boosts the immune system by killing and helping the body expel microorganisms quickly. Silver also does not react with other drugs or the cell structure of human body.

Colloidal silver again gained popularity after 1991 and then the FDA came up with added clarifications and rules not to advertise colloidal silver as a drug. This however alerted many doctors. They say FDA is subverting the grandfathered-in clause' in favor of pharmaceutical companies.

There are always tussles between people approving the use of colloidal silver and people not doing it. Colloidal silver proponents are of the opinion that the publicity against colloidal silver is to protect the interests of major pharmaceutical companies. These pharmaceutical companies spend millions of dollars on developing antibiotics and want to protect their investment. In practice, the antibiotics are often not as effective as colloidal silver and cause the pathogens to mutate and develop anti-biotic defense.

In essence, the FDA stand is not to protect the health and interests of the people, but those of the major players that have the money to do expensive so-called clinical double blind studies.

People opposing the use of colloidal silver site the risks of Argyria. They also say silver has no nutritional value on the human body and is not classified as a nutrient.

The problems with patented drugs and pharmaceuticals are often cited in favor of colloidal silver. A Newsweek Report (March 28, 1994) says 13,000 persons died at different hospitals in 1992 because of the resistance of the pathogens to the antibiotics. Again this resistance to antibiotics has actually developed because of exposure to the antibiotics and mutation by the bacteria.

The resistance of staph infection (*Staphylococcus Aureus*) to penicillin in 1960 was 13%, which increased to 99% in 1997. Infectious germs like this one develop resistance to antibiotics on a regular basis. This leads the pharmaceutical companies to invest more millions of dollars in developing new antibiotics, which in turn will be outdated in a few years and may at some time in the near future be the cause of world-wide pandemics.

The Scope of Colloidal Silver

Colloidal silver has many advantages over antibiotics. The most important among them is its activity against viruses and bacteria. It is effective against any type of infectious germs, being one-celled organisms. The DNA of every known pathogen has a strain that is resistant to at least one antibiotic available in the market. Colloidal silver has one great advantage in that the microorganisms can't mutate to resist the activity of colloidal silver.

Most antibiotics affect normal human cells in addition to killing a germ. Colloidal silver affects the respiratory system of one-celled organisms only and has no adverse effect or affect on the host organism. The action of colloidal silver is possible only on the enzymes of one-celled organisms like bacteria, virus and fungus.

Original at: <http://colloidal-silver.utopiasilver.com/>