

Silver Sol Vs. Colloidal Silver

Dr. Gordon Pedersen on Silver Preparations

For further insight into the differences between silver sol and older silver preparations, consider the following excerpt from Dr. Gordon Pedersen's book, "A Fighting Chance", pg. 14-15.

What is Silver Sol and How Does it Work?

Silver sol, in essence, is simply silver particles dispersed in purified water. The term "sol" is a chemical designation of a pure mineral permanently suspended in water where the mineral's charge is transferred to the entire body of water. Differences between preparations are plenty; however, the silver concentration and the size of the particles can vary greatly, as can the bioavailability of the silver and the effectiveness of the solution. There are also variances in the purity of the solution. Solutions made with metallic silver are tested to be more potent than other silver preparations, such as those made with ionic silver. You may have heard of colloidal silver and ionic silver. While these can be effective solutions, I prefer the new silver technology called silver sol, also called silver aquasol technology.

Silver sol preparations are manufactured by a completely different method, that in my opinion produces a far superior result. Silver sol technology uses 10,000 volts of alternating current (AC), while the old colloids use 110 volts of direct current (DC). This significant increase in power essentially supercharges the silver, which results in a solution that has a different atomic structure than the colloids and ionics. The common colloid is missing one electron in its outer shell, which is why it can remove an electron from the bacteria and destroy it.

In this way, colloids and ionic silvers have been very successful in destroying bacterial infections. Silver sol is an Ag 404; it is missing two electrons in its outer shell, which consequently gives it catalytic capabilities. This capability can be described as one electron destroying bacteria, viruses, and mold while the other electron is being recharged. This catalytic conversion allows the silver sol to first destroy then to instantaneously recharge and "kill" again and again – like a rapid-fire machine gun. The result is that silver sol can destroy thousands of times more pathogens than a simple colloid or ionic silver. This means that silver sol can be much more effective at a very safe concentration (5-20 parts per million, which can potentially be consumed every day).

These newer silver preparations rely on engineered nano-particle solutions with higher bioavailability, effectiveness and safety. Metallic silver gives off ultra-violet radiation in narrow wavelengths. These wavelengths are tested to destroy a wide range of pathogens. The narrow wavelength energy radiated from silver produces free radicals that damage their DNA beyond repair. Silver doesn't even need direct contact with the microbe to create this effect.

Simply put, silver solutions interfere with the energy sources of bacteria, viruses and other microbes. The process is a bit complicated, but basically the charge of silver replaces needed hydrogen atoms, and the result is that it blocks energy sources that microbes need. This reaction can happen within minutes of exposure.

Because silver affects such a basic mechanism of normal microbial function, it is effective against a broad range of pathogens. Even if DNA or RNA structure varies or the mode of attack varies, the basic structure of the pathogen is the same and can be addressed by silver's non-traditional mode of attack. While typical drugs or antibiotics are effective against six or seven microbes, silver preparations are effective against more than 500 different disease-causing pathogens without encouraging drug resistance and without side effects. And a little goes a long way.

The Benefits of Silver Sol

- Broad-spectrum antimicrobial (some silvers have been shown in vitro to destroy bacteria, both forms of viruses, fungus and other significant diseases including the following: MRSA, SARS, malaria, anthrax poisoning, gram-negative bacteria, gram-positive bacteria, Hepatitis C, AIDS, and influenza)
- Potent anti-inflammatory
- Non-toxic, even at high levels
- No side effects or contra-indications; safe for all individuals
- Doesn't encourage resistant microbial strains
- Has prophylactic potential in disease prevention
- Immune system enhancer
- Cost-effective
- Internal and topical usage
- Works synergistically with prescribed antibiotics
- More effective than traditional antibiotics and other drugs

Silver Solution vs. Suspension

When discussing silver preparations, it is important to note the difference between a suspension and a solution. Basically, the difference is in the fineness of particles dispersed. Although particles in a suspension can't be seen, they are still large enough to settle at the bottom of the container over time. But electrically charged ions in a solution will not settle after weeks, months or years. The ideal silver solution perfectly straddles the line between a solution and a suspension because it maintains its molecular identity without large particles settling. While too small particles do not have the correct reactivity, particles of the proper size are more readily absorbed and more catalytically effective at killing pathogens before they are excreted by the body.

Not All Silver is Equal

Not all silver is equally effective. Old silver products were often brown or yellow. They contained more silver but were far less effective, often requiring 50,000 to 300,000 ppm (parts per million) of silver to kill a harmful pathogen. The new silver solution is colorless, odourless, and exhibits only a faint metallic aftertaste. It can terminate entire colonies of harmful bacteria at concentrations of 5 ppm or less.

Likewise, not all new silver products are the same. One product on the market has been shown to inhibit the growth of E. coli at 1,500 ppm. Silver sol has been shown to kill E. coli at a concentration of only 2.5 to 5.0 ppm. That is several hundred times more effective than the colloids or ionic silver preparations.

Silver sol is also much more bio-available than other silver technologies on the market. That means more of the silver is readily absorbed and utilized in the body. Researchers at Brigham Young University tested many current silver products. These products were found to have bioavailabilities between 15 and 65 percent. Silver sol was then tested. It was not only more effective against microbes in laboratory tests, its bioavailability exceeded 99 percent.