

Q. Does silver have a historical use other than as a medium of monetary exchange?

A. Yes! The historical use of silver to preserve and extend the life of food and water is long and indisputable. For thousands of years, it has been used for the same reasons we are using it now in our mineral and water supplement form. From mankind's earliest history, silver has been used in the making of food and drink vessels, as well as eating utensils. Here is an anecdote from the writings of Herodotus, the Greek philosopher, before the birth of Christ. The Greek historian Herodotus, called the "Father of History", is one of our prime sources for information known about the fall of Babylon. Herodotus lived a century after the time of Daniel and traveled widely in the East. In his "Histories", we learn of the campaign of Persia's King Cyrus against Babylon. The details include the fact that no Persian king, including Cyrus, would drink the water of any stream other than the Choaspes, a river that flowed past the Persian capital of Susa. Wherever the king went, a long train of four-wheeled mule wagons followed him transporting silver jars filled with the river's water. The water in silver jars would keep fresh for years during the long campaigns.

The Phoenicians, Greeks, Romans, Egyptians and peoples around the world used silver in one form or another to preserve food and water. In Europe during the "Dark Ages", silver utensils, cups and bowls were utilized to aid in protecting the wealthy from the full brunt of pandemics. The expression "born with a silver spoon in their mouth" comes from these "Dark Ages", when the wealthy gave their children silver spoons to suck on to ward off diseases." In the days of the settling of the American frontier, pioneers commonly used silver coins to retard the spoilage of milk and water.

The use of some silver preparations in modern, mainstream medicine has survived until this "Modern Age." Among them are the use of dilute silver nitrate in newborn babies' eyes to protect from infection and the use of "Silvadine," a silver based salve, in virtually every burn ward in America to fight infection. A silver coated nylon material was patented as "Silvalon" and licensed by FDA as an anti-microbial bandage. Clearly, silver has historically been one of man's most reliable tools in supporting the immune system against various maladies, even before he knew what caused these maladies.

Today, silver is also being used in swimming pool filters, food cutting boards, bandages, and water filters for NASA. Scientific research and evidence indicates that if silver comes into contact with one-celled organisms, they will not survive. Evidence indicates that one-celled organisms do not have an intrinsic resistance to, nor can they through mutation or natural selection, acquire a resistance to silver's anti-microbial actions, as they are often able to do with "patented" products. This is why silver has historically been one of man's most reliable tools in supporting the immune system against various maladies, even before he knew what caused these maladies.

Q: How is silver able to inhibit the growth of one-celled micro-organisms?

A: According to researchers, silver inhibits the growth of one-celled organisms by deactivating the organism's oxygen metabolism enzymes. This action in turn, destroys the organism's cell membranes, stopping the replication of the organism's DNA. This is a completely natural reaction to silver by these organisms and is not chemically manipulated by man. There is also some interesting research with silver prior to the advent of patented anti-biotics. A good example that is available on the Internet is "The Use of Colloids in

Health and Disease" by Alfred B. Searle, the founder of Searle Pharmaceuticals (now known as Monsanto). Although this book is dated in some respects, it demonstrates the research that had already been done as well as that which was ongoing in the area of "colloidal silver" before more lucrative patented concoctions (drugs) replaced it in the marketplace. This book cites research done by numerous scientists and documents their findings demonstrating the germicidal properties of silver.

One of the most widely publicized concerns today relating to biological warfare and terrorism is the fact that microbes have mutated and become resistant so that "patented" antibiotics may often be rendered ineffective. On the other hand, research and evidence indicates that one-celled organisms do not have an intrinsic resistance to, nor can they through mutation or natural selection, acquire a resistance to silver's anti-microbial actions. Again, this is why silver has historically been one of man's most reliable tools in supporting the immune system against various maladies, even before he knew what caused these maladies.

Q. If silver is such a potent anti-microbial agent, why isn't it used by mainstream medicine to treat people with illnesses for which there may be no other help?

A. First of all, there is a mindset within the "medical establishment" that believes that no method or product is valid unless it has gone through their filter of approval. Some of this comes from an inherent academic and intellectual arrogance that often pervades any field or professional in which a higher level of education is required. But the primary reason is that the medical education system, as well as the lion's share of research, is funded by companies and organizations that have a vested interest in ensuring that only more profitable patentable medicines/drugs are approved. Products such as silver and water are probably not patentable and would not be as profitable. This same establishment almost never gives "alternative and/or natural" remedies any scientific study or research to truly determine if they can work or not. I also question whether or not this system truly wants to cure anything; there is more profit in the long term treatment of a disease than there is in curing a disease. An indication of this is the fact that most mainstream products temporarily treat symptoms rather than curing the underlying causes of disease. Notwithstanding diseases caused by micro-organisms, I believe that most of the ailments of man and animal are generally triggered by mineral deficiencies. These deficiencies can also cause us to have a lower resistance to microbes.

Q: Are colloidal silver products safe?

A: Colloidal Silver, taken according to our serving suggestions, contains less than one third the amount of silver referenced by the EPA in their drinking water standards. Utopia Silver Supplement's suggested one-per day serving contains approximately 100 micrograms of silver. The Environmental Protection Agency's maximum daily reference dose of silver is 350 micrograms. That equates to approximately three and one half teaspoons of our Colloidal Silver.

Although gelatinous/protein, saline, and/or nitrate based silver products may cause the cosmetic condition Argyria with overuse, no death that we are aware of has ever been documented as being caused by any silver or gold supplement. Our Colloidal Silver is not a gelatinous based product; it is simply mineral and de-ionized water. We have sworn testimony from a forensic toxicologist that there is no known toxic level that has been established for silver or gold.

Silver is one of the few substances that has a reference dose not based on an adverse health effect and for which the EPA removed the maximum silver contaminate level for drinking water. This action was obviously driven by the recognized low or non-toxicity associated with this mineral. As far as any claimed toxicity is concerned, drinking water is allowed to have three and one half times as much silver for an average daily consumption as a serving of Colloidal Silver provides. If it is safe to drink from the public water supplies of America containing naturally occurring silver, it is perfectly safe to use this dietary supplement, even up to three and one half times the suggested serving for any purpose you choose.

You may ask: How can such a small amount of silver have a positive effect within the body? The secret is in the infinitesimal size of the silver particles. A billion of these silver particles could sit side by side on a cross section of human hair. The reason it works so well is that such a large percentage of the surface area of silver atoms are exposed to the body's fluid environment, allowing these tiny particles to penetrate even the deepest tissues of the body and thereby supporting the immune system. These silver nano-particles are smaller than any blood cell, bacteria, fungus spore, or even virus. This is the key to the effectiveness of Colloidal Silver and the primary reason a 20 ppm silver product is all that is required to do the job.

One possibility to be aware of is that a very small percentage of people do have allergies to various metals and if you cannot wear silver or gold jewelry because of an allergy, it may be best not to supplement with them either.

Anything can be abused or misused. An aspirin or two may relieve a headache, but a bottle of aspirin taken at one time can cause death. Most over-the-counter pain medications cause thousands of deaths and thousands of damaged organs each year. Patented antibiotics also cause thousands of deaths each year. Over consumption of drinking water in a short time span kills a number of people each year by diluting the electrolytes or rupturing the stomach, ...but should this define our use of water?

Q: How important is particle size and is a high ppm colloidal silver product required for effectiveness?

A: You cannot judge colloidal silver products based solely upon parts per million (ppm), but a smaller particle size product is potentially more effective. Silver is only effective to the degree that the surface area of the silver particles are able to come into contact with a micro-organism. I'll exaggerate with size so you can get a clear mental image of this concept. Imagine a silver particle the size of a 55 gal. barrel with the outside of the barrel being the surface area that comes in contact with the surrounding environment; then compare that with the same barrel filled with silver particles the size of marbles or BBs. There are many times more effective surface areas to contact the surrounding environment with the smaller particles than with the larger particles. It also enables them to travel more easily in the body's fluid environment.

High ppm products generally are comprised of much larger particles suspended in a gelatinous base to keep them from falling out, which means that more of it may either collect in the tissue under the skin or be eliminated from the body without being utilized. High ppms are only necessary when the silver particle size is very large and therefore must make up for an inefficient surface area with more parts per million.

The truth is, silver of any size can be effective against micro-organisms, such as the use of silver utensils and cups, putting silver coins in water or milk, or even wearing silver jewelry where it is assimilated through the skin. There is no doubt that silver is only effective to the degree that it is able to come into contact with microbes and is therefore more effective if it has a particle size small enough to get down to the cellular level, but the debate about particle size can become somewhat academic. Smaller size enables the particles to travel more easily in the body's fluid environment, giving the silver easier access to all areas of the body and to microorganisms, but particle size in the 2-10 nanometer range, will be able to travel effectively anywhere in the body it is needed.

Q: Which colloidal silver is most effective, ionic or non-ionic?

A: There is much debate within the colloidal silver community about ionic silver vs. non-ionic silver. We believe there are misconceptions on both sides of the issue: by some that only non-ionic "silver particles" are effective and by others that "ionic silver" is more effective. The truth is: ionic silver is still silver, but electrically charged, either negative or positive. Both seem to have their own distinct advantages in different environments. Generally, ionic silver loses its effectiveness in the hydrochloric acid of the stomach becoming silver chloride and passing harmlessly out of the system. Internally, non-ionic silver doesn't have that limitation and is able to survive the digestive acids and be absorbed into the bloodstream where it can then act to support the immune system.

Ionic silver may be more effective in environments where it doesn't come in contact with hydrochloric acid. We believe that a product such as our " Colloidal Silver" gives you the best of both worlds with approx. 20-25% ionic silver and 75-80% non-ionic silver particles.

Our Colloidal Silver is about 20 ppm consisting of approximately 80% ionic silver and 20% non-ionic silver. As you may know, there is ongoing debate about which is better, but it is our opinion that both may have their own distinct advantages in different environments. There is a misconception by some that only non-ionic silver particles are more effective and by others that only ionic silver is truly effective. This is possibly due to the fact that a producer and marketer is generally going to espouse that which will support his product.

The truth is: ionic silver is still silver, but electrically positively charged and may be more effective in non-hydrochloric acid environs. Non-ionic silver is more effective in the stomach and beyond. We believe that our product gives you the best of both worlds, with a mean average particle size of approximately 2 nanometers. This particle size not only gives significantly more active silver surface area than even the high ppm, large particle, gelatinous based products, but also is more effective at getting down to the cellular level of your own body, as well as that of microbial bodies.

One of the most frequently asked questions concerning colloidal silver is, "Does colloidal silver use result in reduction of beneficial bacteria in the human digestive system?" This question is often answered, emphatically, "No" by purveyors of some "colloidal silver" products. They are answering correctly for the ionic products they are referring to, but for other colloidal silver containing silver particles, the correct answer is, "In many cases, yes."

The purpose of this article is to explain this seeming contradiction between ionic silver and non-ionic silver. If you have ever taken pharmaceutical antibiotics, you probably have

experienced a die-off of the beneficial digestive bacteria in the lower bowel. Diarrhea is one of the symptoms of this die-off of bacteria. Organisms which include e-coli are essential to proper digestion of food and non-ionic colloidal silver will readily reduce the amount of e-coli and other bacteria that live in the lower human colon. A purely ionic "colloidal silver" product generally will not have this effect.

Here is why:

Silver can exist in water in two forms, the ionic form and the elemental form. In the ionic form, silver is part of a compound (the chemical union of two or more elements), which exists separately from its other ionic component. Silver nitrate is a common compound of silver and nitrogen; silver oxide, known as "tarnish" on sterling silver is a compound of silver and oxygen. Another silver compound is silver chloride. This compound is the common one which forms when ionic silver meets the human stomach. Hydrochloric acid is a major ingredient of the mixture in the "digesting" stomach.

Using a chemistry definition, true colloidal silver is defined as tiny particles of elemental silver suspended by "Brownian motion". These tiny elemental particles of silver which are ingested through the mouth in colloidal silver are absorbed, partially in the mouth, stomach, and intestine, but can also reach the lower bowel. It is here that they may kill some "beneficial" bacteria.

When ionic silver reaches the stomach, it combines readily with the chloride ion (from the ever-present hydrochloric acid) and becomes a virtually inert, insoluble compound, passing from the body in time and having little effect on any organism in the body, including the "beneficial" flora in the lower bowel. This ionic silver will not kill the other germs it encounters in the bloodstream or cells of the body beyond the stomach because it is now part of a new compound called silver chloride. That is why both are correct. Those speaking of ionic silver are right when they say, "it doesn't kill the beneficial flora" because it generally reaches the lower bowel as silver chloride. Those who say it can kill the flora in the lower bowel are right when speaking of non-ionic colloidal silver because the tiny particles survive the stomach acid and can potentially reach the lower bowel.

So, what can users of colloidal silver do to avoid the side effect of die off in the lower bowel? Small maintenance servings of Colloidal Silver is usually absorbed thoroughly enough in the upper digestive system (mouth, throat, and stomach), so that little, if any reaches the lower bowel to kill e-coli and other bacteria and cause diarrhea. Therefore, there is no need to do anything to replenish lost bacteria. On the other hand, if one takes more than usual and drinks several ounces of liquid right away, it will likely make it to the lower bowel and partially kills the digestive flora. This may result in a usually mild bout of diarrhea, but the flora generally replenishes itself naturally.