

Optimize Cholesterol Levels with Total Body Detoxification



By Lyn Hanshaw, M.D.

A never ending stream of media propaganda promotes yet another “statin” drug to lower your “bad LDL cholesterol” that supposedly leads to heart attack, stroke, erectile dysfunction, etc. It is amazing to watch and listen to this deceptive and misleading information being transmitted to the masses. An estimated six billion dollars were spent on pharmaceutical drug TV ads last year. Why? Because the ads work by desensitization, in spite of the litany of side-effects (even death!) listed at the end of each ad. “Statin” drugs themselves are hepatotoxic and

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Comparing Kill Kinetics of the Leading Antimicrobials



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numerous medicinal purposes.

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Optimize Cholesterol Levels with Total Body Detoxification

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A never ending stream of media propaganda promotes yet another “statin” drug to lower your “bad LDL cholesterol” that supposedly leads to heart attack, stroke, erectile dysfunction, etc. It is amazing to watch and listen to this deceptive and misleading information being transmitted to the masses. An estimated six billion dollars were spent on pharmaceutical drug TV ads last year. Why? Because the ads work by desensitization, in spite of the litany of side-effects (even death!) listed at the end of each ad. “Statin” drugs themselves are hepatotoxic and regular blood testing for elevated liver enzymes must be performed.

- The “statin” drug class causes birth defects,
- Headache -- in up to 16.7 percent of people
- Infections -- up to 10.3 percent
- Muscle pain -- up to 5.6 percent
- Diarrhea -- up to 5.3 percent
- Joint pain -- up to 5.1 percent
- Sinusitis -- up to 6.4 percent

“Statin” drugs are being promoted to reduce LDL cholesterol levels because elevated LDL cholesterol has statistically been associated with a higher rate of cardiovascular deaths. However, a statistical association does not prove “cause and effect”. It makes no more sense to say that the firemen found fighting a fire are, in fact, the cause of the fire. Within the cell membrane, cholesterol functions in intracellular transport, cell signaling and nerve conduction. Cholesterol is essential for the structure and function of the cell membrane. The role of cholesterol in endocytosis is critical. Recently, cholesterol has also been implicated in cell signaling processes, assisting in the formation of lipid rafts in the plasma membrane. In many neurons a myelin sheath, rich in cholesterol, provides insulation for more efficient conduction of impulses.⁽²⁾ Within cells, cholesterol is the precursor molecule in several biochemical pathways. In the liver, cholesterol is converted to bile, which is then stored in the gallbladder. Bile contains bile salts, which solubilize fats in the digestive

tract and aid in the intestinal absorption of fat molecules as well as the fat soluble vitamins, Vitamin A, Vitamin D, Vitamin E and Vitamin K. Cholesterol is an important precursor molecule for the synthesis of Vitamin D and the steroid hormones, including the adrenal gland hormones cortisol and aldosterone as well as the sex hormones progesterone, estrogens, and testosterone and their derivatives.⁽²⁾

The side effects of statin drugs correlate exactly to their known mechanisms of action. One of the most important side-effects is the interference with the production of Coenzyme Q10 (CoQ10).⁽⁶⁾

CoQ10 is the naturally-occurring form of ubiquinone in humans. Ubiquinone is widely recognized as an essential component of energy metabolism in the electron-transfer system in mitochondrial membranes. At physiological concentrations it is also recognized as an effective lipid-soluble antioxidant. It is one of the end products of the mevalonate pathway where dolichol and cholesterol are synthesized. Both ubiquinone and dolichol are released by the liver cells into the blood circulation, but in much lower concentrations than that of cholesterol.^(2, 7, 8)

Ghirlanda et al reported in a double-blind, placebo-controlled study a decrease of 50-54% of CoQ10 levels in the statin treatment groups, and similar results were reproduced by Watts et al.^(7, 8)

Bliznakov and Wilkins reviewed studies of the effect of statins on the biosynthesis of CoQ10 and the clinical implication of CoQ10 deficiency. The authors report that lovastatin, pravastatin and simvastatin lower the endogenous levels of CoQ10.⁽⁹⁾

Considering that Co Q10 is essential for mitochondrial function and antioxidant activity, and since oxidative mechanisms are important in atherogenesis, it can be assumed that a reduction in CoQ10 level may compromise cardiac function despite optimal reduction in cholesterol levels by the use of “statin” drugs.⁽¹⁰⁾

Furthermore, the reduction of ubiquinone levels might be associated with myopathy, a rare adverse effect associated with statin

drugs. This “metabolic” myopathy is related to ubiquinone deficiency in muscle cell mitochondria, disturbing normal cellular respiration and causing adverse effects such as rhabdomyolysis, exercise intolerance, and recurrent myoglobinuria, and encephalopathies.^(11, 12, 13)

Cholesterol Cause and Effect

Elevated LDL cholesterol poses a risk for cardiovascular disease when it invades the endothelium and becomes oxidized, since the oxidized form is more easily retained by the proteoglycans. A complex set of biochemical reactions regulates the oxidation of LDL, chiefly stimulated by the presence of free radicals in the endothelium. The more toxic metals residing in the body, the higher the free radical activity. Heavy metals in the body exponentially increase free radical activity and today everyone has far more heavy metals than ever. Thus, removing toxic metals from the body will greatly reduce the number and activity of free radicals.⁽⁵⁾

Detoxifying the body of toxic heavy metals and reducing free radical exposure may alter the contribution of cholesterol to atherosclerosis.⁽⁵⁾

Selective Chelation by Adsorption

In weighing the advantages and disadvantages of the evidence-based detoxification products available, the mechanism of toxicant binding is of primary consideration. Although profound in application, the binding action of zeolite is simple to understand.

The uptake of toxic heavy metals, chemical toxins or other free radicals in zeolites is called adsorption. Adsorption (not to be confused with absorption) is the accumulation of atoms or molecules on the surface of an adsorbent solid, such as zeolite. The driving force behind adsorption is the highly polar surface within the pores of the zeolite structure. This unique characteristic distinguishes zeolites enabling an extremely high adsorption capacity for water and other polar components even at very low concentrations. Advanced Cellular Zeolite (ACZ) nano® crystals are characterized by a

three-dimensional pore system, with pores of precisely defined diameter. Pores of precisely uniform openings within these nanomized, crystalline structures allow for molecules smaller than its pore diameter, such as Mercury, to be adsorbed while excluding larger molecules, such as Calcium and Potassium, hence the name “molecular sieve”. Depicted in the diagram, smaller Mercuric ions are pulled deeply into the nanomized zeolite cage structure and held securely for safe elimination, while Calcium and Potassium are “sieved”.

ACZ nano®: Antioxidant

ACZ nano® has powerful antioxidant properties. Its structure not only traps toxins such as toxic heavy metals, but also free radical molecules. However, unlike classic antioxidants, nanomized zeolite crystals do not neutralize free radicals by donating an electron to stabilize them. Instead, the structure of the zeolite is such that it captures the free radical and locks it safely away so that it cannot harm the body. Once trapped in the zeolite, the inactivated free radical can then safely be eliminated from the body.

A safe and proven detoxification agent, ACZ nano® Intra-oral spray selectively and irreversibly binds toxic substances, without binding or removing nutrient elements. ACZ nano® safely removes Mercury, Lead, Aluminum, Antimony, Arsenic, Barium, Bismuth, Cadmium, Cesium, Gadolinium, Gallium, Nickel, Niobium, Platinum, Rubidium, Thallium, Thorium, Tin, Tungsten, Uranium and more.

Patient Case Studies

The following four patients had heavy metal urine challenge testing done and tested positive for a wide range of toxic heavy metals including Mercury, Lead, Aluminum, Arsenic and Tin. As their toxic heavy metal levels were reduced by ACZ nano®, their lipid levels shift-

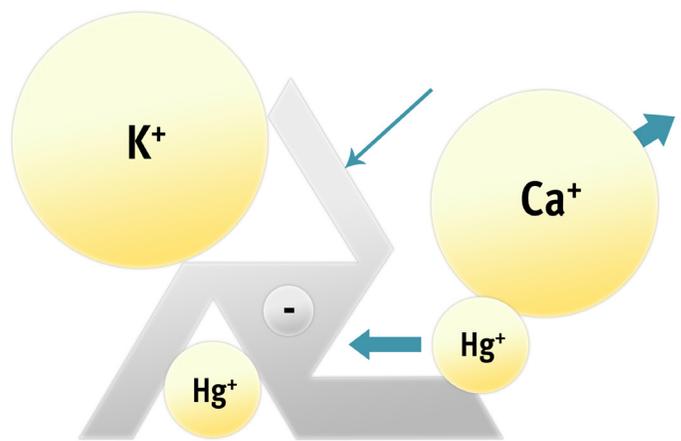
ed to a more favorable profile in a surprisingly short amount of time. There was no toxicity or side effects. Compare these favorable results to the significant life threatening side effects caused by the use of “statin” pharmaceutical drugs.

Protocol: 3 months on ACZ nano® using 15 sprays daily intra-orally

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Cleaned Zeolite: Negatively Charged Cage Structure



Molecular selectivity series of ACZ nano® is backed by atomic absorption spectroscopy studies. As you can see, toxic heavy metals are highest in preference of attraction.



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Protocol: 3 months on ACZ nano® using 15 sprays daily intra-orally

Patient 1- 52 y/o male	Pre-Treatment	Post-Treatment
Total Cholesterol	267 mg/dl	195 mg/dl
Patient 2-36y/o female	Pre-Treatment	Post-Treatment
Total Cholesterol	228 mg/dl	189 mg/dl
Patient 3-60 y/o female	Pre-Treatment	Post-Treatment
Total Cholesterol	231 mg/dl	165 mg/dl
Patient 4- 70 y/o female	Pre-Treatment	Post-Treatment
Total Cholesterol	259 mg/dl	197 mg/dl

Comparing Kill Kinetics of the Leading Antimicrobials

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Silver has been known for its medicinal and antimicrobial properties for thousands of years. Hippocrates, “Father of Medicine,” used silver for tissue repair & wound healing. In 69 B.C. silver nitrate was described in the contemporary pharmacopoeia. The ancient civilizations of Greece and Rome used silver to control bodily infection & prevent food spoilage. The King of Persia used silver containers to carry water to prevent contamination. Throughout the ages, the ‘Metal of the Moon’ as it was known to some of the ancients has been used effectively for numerous medicinal purposes.

Beyond prescribing any silver-based product for its antimicrobial effect, it is necessary in successful practice to distinguish the vast differences in performance amongst competing brands. Clearly silver is not just silver. Major formulation advancements have been made in the last 150 years since the first electrolytically produced colloidal silvers came into existence. To understand the difference in antimicrobial activity between the leading evidence

based silver products currently available, we need only compare kill kinetics studies against various benchmark microorganisms. The most effective antimicrobials within the clinical setting are defined as broad-spectrum; exhibiting bactericidal, virucidal, fungicidal and more in killing effect. As there are a near infinite

number of types, and genetic variations of pathogens, antimicrobial research is best accomplished by Association of Analytical Communities (AOAC) standard, invitro kill time studies. This is the same protocol utilized by the Environmental Protection Agency (EPA) in determining the germicidal efficiency of a pesticide/disinfectant. The AOAC protocols are accepted and recognized as standard.

In my investigations, I have compiled kill kinetics data of three of the better known silver-based antimicrobial products currently on the market, which I obtained from the manufacturer’s own websites. Included in this comparative analysis are the independently derived, and independently published kill kinetics test results of Results RNA Advanced Cellular Silver (ACS) 200®, American Biotech ASAP silver® and Purest Colloids,

Inc. MesoSilver® against three benchmark microorganisms; Methicillin resistant Staphylococcus aureus (MRSA), Candida albicans, and Staphylococcus aureus.

Before we examine the data, a simple defining of terms is necessary:

- **Titer:** Synonymous with Microbe Concentration. Titer refers to the number of organisms calculated in the culture prior to testing.
- **Log Reduction:** Defines the percentage of kill in logarithms.

Methicillin resistant Staphylococcus aureus (MRSA) – Comparative Kill Time Study

- ACS 200® (tested by AOAC) provides a >6.64 log reduction/99.999984% complete kill in less than 3 minutes.
- ASAP® silver provides a >4.98 log reduction/99.9989% complete kill in 60 minutes.
- MesoSilver® requires 300 minutes to achieve complete kill against MRSA. (Actual Log reduction not provided in published report.)

Microbe Concentrations: The initial microbe concentration (titer) of MRSA used with ACS 200® for testing is significantly larger than the titers used by ASAP® silver and MesoSilver®.

Comparisons are as follows:

MRSA	Titer	Log Reduction	Time
ACS 200*	2,170,000,000	6.64/99.999984%	< 3 minutes
ASAP silver	1,900,000	4.98/99.9989%	60 minutes
MesoSilver	1,200,000	Log not provided claimed kill	5 hours

* Performed using AOAC methods
 ACS 200 titer is 114,210% greater than ASAP silver titer
 ACS 200 titer is 180,833% greater than MesoSilver titer
www.aoc.org - Association of Analytical Communities

MRSA Microbe Concentrations by Product

- ACS 200® MRSA titer: 2.17 X 10⁹
- ASAP® silver MRSA titer: 1.9 x 10⁶
- MesoSilver® MRSA titer: 1.2 x 10⁶

MRSA Microbe Concentrations Compared

- The 2.17 X 10⁹ ACS 200® titer is 1,142 times larger than the 1.9 x 10⁶ ASAP® silver titer.
- The 2.17 X 10⁹ ACS 200 titer is 1,808 times larger than the 1.2 x 10⁶ MesoSilver® titer.

MRSA Testing Conclusion:

- ACS 200® achieves complete kill (without a single organism left alive) against 2,170,000,000 MRSA organisms in less than 3 minutes.
- ACS 200® achieves a significant 20 times faster kill than ASAP® silver against Methicillin resistant Staphylococcus aureus evidencing a 3 minute/99.999984% >6.64 log reduction versus a 60 minute/99.9989% >4.98 log reduction, while killing an 1,142 times greater number of MRSA organisms.

ACS 200® achieves a significant 100 times faster kill than MesoSilver® against Methicillin resistant Staphylococcus aureus evidencing a 3

minute/99.999984% >6.64 log reduction versus a 300 minute kill time, while killing an 1,808 times greater number of MRSA organisms.

Candida albicans – Comparative Kill Time Study

- ACS 200® provides a >5.95 log reduction/99.99989% kill in 2 minutes.
- ASAP® silver provides a >4.83 log reduction/99.9985% kill in 60 minutes.
- MesoSilver® requires 1,440 minutes to achieve complete kill. (Actual Log reduction not provided in published report.)

Microbe Concentrations: The initial microbe concentration (titer) of Candida albicans used with ACS 200® for testing is significantly larger than the titers used by ASAP® silver and MesoSilver®. Comparisons are as follows:

Candida albicans Microbe Concentrations by Product

- ACS 200® Candida titer: 4.45 x 10⁸
- ASAP® silver Candida titer: 1.3 x 10⁶
- MesoSilver® Candida titer: 1.2 x 10⁴

Candida Microbe Concentrations Compared

- The 4.45 x 10⁸ Candida titer (ACS 200®) is 342 times larger than

the 1.3 x 10⁶ Candida titer (ASAP® silver).

- The 4.45 x 10⁸ Candida titer (ACS 200®) is 37,083 times larger than the 1.2 x 10⁴ Candida titer (MesoSilver®).

Candida Testing Conclusion

- ACS 200® achieves complete kill (without a single organism left alive) against 445,000,000 Candida organisms in less than 3 minutes.
- ACS 200® achieves a significant 30 times faster kill than ASAP® silver against Candida albicans evidencing a 2 minute/99.99989% >5.95 log reduction versus a 60 minute/99.9985% >4.83 log reduction, while killing a 342 times greater number of Candida organisms.
- ACS 200® achieves a significant 720 times faster kill than MesoSilver® against Candida albicans evidencing a 2 minute/99.99989% >5.95 log reduction versus a 1,440 minute kill time, while killing a 37,083 times greater number of Candida organisms.

Staphylococcus aureus – Comparative Kill Time Study

- ACS 200® provides a >5.37 log reduction/99.9996% kill in 15 seconds.
- ASAP® silver provides a >5.06 log reduction/99.99914% kill in 60 minutes.

MesoSilver® requires 1,440 minutes to achieve complete kill. (Actual Log reduction not provided in published report.)

Microbe Concentrations: The initial microbe concentration (titer) of Staphylococcus aureus used with ACS 200® for testing is significantly larger than the titers used by ASAP® silver and MesoSilver®.

C. albicans	Titer	Log Reduction	Time
ACS 200*	445,000,000	5.95/99.99989%	2 minutes
ASAP silver	1,300,000	4.83/99.9985%	60 minutes
MesoSilver	12,000	Log not provided claimed kill	24 hours

** Performed using AOAC methods
ACS 200 titer is 34,230% greater than ASAP silver titer
ACS 200 titer is 370,833% greater than MesoSilver titer*

Comparisons are as follows:

Staphylococcus aureus Microbe Concentrations by Product

S. aureus	Titer	Log Reduction	Time
ACS 200*	234,000,000	> 5.37/99.9996%	15 seconds
ASAP silver	2,300,000	> 5.06/99.99914%	60 minutes
MesoSilver	830,000	Log not provided claimed kill	24 hours

** Performed using AOAC methods
ACS 200 titer is 10,173% greater than ASAP silver titer
ACS 200 titer is 28,192% greater than MesoSilver titer*

With enhanced killing effect, superior efficacy and patient outcomes are readily discernable with ACS 200® versus competing antimicrobial products.

- ACS 200® S. aureus titer: 2.34×10^8
- ASAP® silver S. aureus titer: 2.3×10^6
- MesoSilver® S. aureus titer: 8.3×10^5

Microbe Concentrations Compared

- The 2.34×10^8 ACS 200® titer is 101 times larger than the 2.3×10^6 ASAP silver titer.
- The 2.34×10^8 ACS 200 titer is 281 times larger than the 8.3×10^5 MesoSilver® titer.

Staph Aureus Testing Conclusion:

- ACS 200® achieves complete kill (without a single organism left alive) against 234,000,000 S. aureus organisms in less than 15 seconds.
- ACS 200® achieves a significant 240 times faster kill than ASAP® silver against S. aureus evidencing a 15 second/99.9996% >5.06 log reduction versus a 60 minute/99.99914% >5.06 log reduction, while killing 101 times greater number of S. aureus organisms.
- ACS 200® achieves a significant 5,760 times faster kill than MesoSilver® against S. aureus evidencing a 15 second/99.9996% >5.06 log

In our clinical experience over the last several years, many practitioners have seen ACS 200® perform extremely well against a host of pathogenic microorganisms, with high benefit and very little risk.

All original studies referenced in this article can be downloaded at ResultsRNAResearch.com

reduction versus a 1,440 minute kill time, while killing a 281 times greater number of S. aureus organisms.

As you can see, the performance of these three silver formulations differs greatly. ACS 200® achieves 100's of times faster kill in just minutes, against thousands of times greater number of pathogenic microorganisms.

About the Author



Dr. Hanshew practiced medicine on the seaside of Seattle for 15 years. She achieved Board-Certified in Family Medicine and Bariatric Medicine. She also has specialized training in Anti-Aging Medicine, Natural Hormone Replacement and Environmental Toxicity issues relating to the exponential rise in the incidence and successful treatment of Autism, Fibromyalgia, ADD, Chronic Fatigue, Multiple Sclerosis, Obesity, Anxiety, Depression and Cancer.