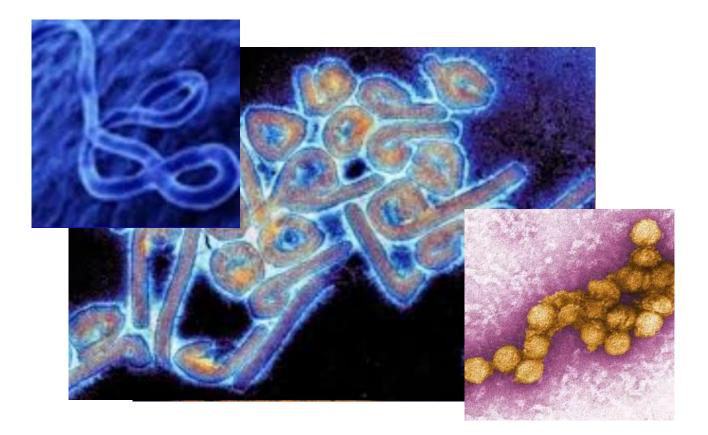
# NEW WEAPONS IN TREATING DISEASE: A SPECIAL REPORT



#### 11/1/2014 Effective treatments are now obtainable

In the natural course of aging, the homeostasis in the network of oxidative stress responses is disturbed by a progressive increase in the intracellular level of the ROS generated by defective mitochondria. Over the last several decades there have been revolutionary breakthroughs in the understanding of, and treatment of aging and disease. This report will discuss breakthrough modalities that support the intrinsic ability to self-heal.

## Treating today's diseases effectively: a special report

#### EFFECTIVE TREATMENTS ARE NOW OBTAINABLE

### New Ways of Healing

We are all contaminated, whether by toxins or disease and we are all suffering from power failure. "Every one of the diseases we can't solve is absolutely logical if we put energy at the center", says Dr. Douglas Wallace of the Center for Mitochondrial and Epigenomic Medicine in Philadelphia. Energy medicine modalities and oxidative therapies that support the body's natural immune system and detoxification functions are nano-colloidal silver (anti-bacterial/anti-fungal/anti-viral), pulsed electro-magnetic frequency (PEMF) and microcurrent therapies, ultraviolet blood irradiation (UVBI) therapy, and far Infrared (FIR) sauna with ozone.

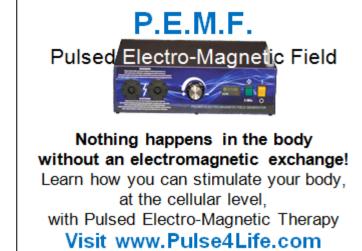
Antibiotics are no longer working for most infections and wind up killing useful gastrointestinal organisms we need to remain healthy. However, there are very powerful, yet safe and effective silver solutions that are being used by major hospitals like Harvard's Brigham & Women's, to protect patients and staff against dangerous pathogens. <sup>[1]</sup> There is also released a 19 page report from the U.S. Air Force 711th Human Performance Wing, under Drs. Speshock and Hussain, showing that nano-particle silver neutralizes hemorrhagic fever virus like Ebola. <sup>[2]</sup> Silver paired with the newly available redox signaling molecule supplements provide unmatched immune system protection and support.

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PEMF assists with cell and mitochondrial functioning by increasing the production of energy (ATP), and induces electroporation that helps to facilitate intracellular nutrient uptake and cation exchange, autophagy, and detoxification. PEMF can increase the efficacy of antioxidants up to 100-fold. And according to a recent New York Times article, microcurrent frequencies may someday replace pharmaceutical drugs in the treatment of inflammatory afflictions like rheumatoid arthritis and Crohn's disease. Kevin Tracy of the Feinstein Institute for Medical Research has conducted a study involving stimulating the vagus nerve with electrical frequencies. His work demonstrates that the nervous system can be likened to a computer terminal, through which you can deliver commands to stop a problem, like acute inflammation, before it starts, or repair a body after it gets sick. Electricity delivered to the vagus nerve in just the right intensity and at precise intervals could reproduce a drug's therapeutic effects. <sup>[3]</sup>

We are exposed to more toxins today than ever before. Most chronic diseases are related to toxicity, resulting in mitochondrial dysfunction and loss of energy production. Mitochondria are acutely vulnerable to environmental contaminants including many pharmaceuticals.<sup>[4]</sup>

Phthalates and flame retardants are found in nearly everyone. Bisphenol A is in urine of 90% of people tested, and 5% have unsafe urine Cadmium levels. The reason mitochondria are targeted is due to the high



lipid content of mitochondrial membranes, which facilitate accumulation of lipophilic compounds such as polycyclic aromatic hydrocarbons (PAHs), as well as some alkylating agents as used in cancer treatments. Cationic metals, such as lead, mercury, cadmium and manganese, have also been shown to accumulate in mitochondria preferentially. This illustrates how toxic and heavy metal exposures early in life, may promote disease later in life, via epigenetics. <sup>[5]</sup>

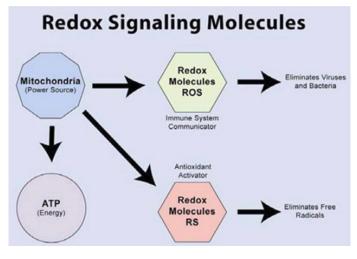
Induced sweating is the most effective method for the elimination of toxins such as BPA and endocrine disrupting phthalates. <sup>[6]</sup> FIR sauna treatments used in conjunction with ozone are powerfully effective for full body detoxification. The skin is a major organ of elimination, but many people do not sweat on a regular basis. Fir saunas utilize specific light wavelengths, that penetrate deeply into the skin without burning the surface, enhancing circulation and helping oxygenate tissues. Regular use can restore skin elimination, reducing the body's toxic load quite significantly of heavy metals and chemicals.<sup>[7]</sup> As the skin relaxes and pores open, the ozone is allowed to penetrate all areas helping to kill off viruses and other microbes – and infections involved in proliferation of cancerous cells.

Another oxidative therapy that has powerful anti-infection properties is UVBI therapy. UVBI, also known as photo-oxidation therapy, is a biological healing modality utilizing ultraviolet irradiation of the blood (with UV Ultraviolet C light). It has been shown to produce many beneficial photochemical reactions, such as improved micro-circulation and oxygenation of tissues, anti-inflammatory effects, stimulation of the immune system, resolution of vascular

spasms, and cardiovascular protection through increased metabolism of cholesterol, uric acid, and glucose. <sup>[8]</sup>

As mitochondria produce ATP they give out charged molecules called reactive oxygen species (ROS), also called free radicals, as well as reduced species (RS) molecules.<sup>[9]</sup> ROS *can* cause extensive oxidative damage to various bio-molecules such as DNA, RNA, and proteins. These damages are believed to be the main etiologic factor in aging and the development of chronic diseases such as cancer, atherosclerosis, and the formation of cataracts.<sup>[10]</sup>

Once thought to have only destructive effects, as Harmon's Free Radical Theory of Aging has edified, we have now learned that ROS are essential signaling molecules needed to regulate critical cell processes that stimulate immune responses against viruses, assist in autophagy, and protect us against the ravages of time.<sup>[11]</sup> There needs to be a balance. Consuming too many antioxidants can disrupt the precise balance of mitochondrial cell signaling facilitated by ROS and RS, and each performing a critical function. Typically, ROS molecules facilitate immune system communication, attacking viruses, bacteria and other pathogens. RS molecules are required to *activate* anti-oxidants such as glutathione which neutralizes oxidation.<sup>[9]</sup>



ROS and RS redox signaling messengers are intimately involved in cellular reception of and response to stressors; redox messengers are involved in mediating antioxidant production and action to protect the cells, autophagic repair mechanisms necessary to fix DNA and structural damage, and also in mediating the apoptotic processes that result in cell death. So instead of elimination, an increase in the concentration of ROS and RS redox signaling molecules in the body may serve

to augment the efficiency of normal cellular processes, and antioxidant efficacy. <sup>[12]</sup>

There is now available in supplement form, an electrolyzed-reduced saline water solution, and gel, both containing stabilized redox signaling molecules. In clinical studies, an 800% increase in intracellular production of glutathione, and a 500% increase of superoxide dismutase (SOD) efficacy was seen.<sup>[13]</sup> Glutathione is the body's master anti-oxidant. It helps to detoxify the body by converting toxins into forms that can be excreted by the body. Glutathione supplements can be helpful, although stomach acid will neutralize most oral glutathione with little reaching the blood.<sup>[9]</sup> Nebulizing redox signaling water may be used for respiratory

conditions such as COPD and emphysema, as the pathogenesis of these conditions include inhibited cellular repair processes due to oxidant/antioxidant imbalance. A recent study indicates that fibroblast repair may be modulated by intracellular glutathione levels.<sup>[14]</sup> SOD is another powerful antioxidant, that also exhibits potent anti-inflammatory activity. SOD is a highly effective experimental treatment of colonic inflammation in colitis. Treatment with SOD decreases ROS generation and oxidative stress, and inhibits endothelial activation; indicating a modulation of factors that govern adhesion molecule expression and leukocyte-endothelial interactions, and so increasing SOD may be of critical importance in the treatment of inflammatory bowel disease.<sup>[13]</sup>



Redox signaling molecules in water and gel suspension form, have been strenuously tested and are completely safe with zero toxicity. There were no toxic responses observed for any healthy cell cultures exposed to the formula concentrations. Two methods were used to determine toxic response, the translocation and accumulation of NF-kB and P-Jun in the nuclei. Both of these methods are known to be sensitive to low-levels of toxicity, as verified by the positive control. A complete lack of toxic indication and/or inflammatory cytokines was observed. <sup>[13]</sup>

Our toxic burden is a result of the toxins and infections that we are exposed to on a daily basis. The more toxins we are exposed to, the harder the body has to work at eliminating these toxins. Our bodies do have the ability to naturally detox, but the capacity of the body's immune system and detox processes is not endless. We need to employ safe, effective and affordable methods of detoxification and repair, to help restore our bodies cellular functioning to achieve and maintain health and longevity. For more information about the methods and modalities discussed in this report, please contact the Gordon Research Institute or visit www.gordonresearch.com



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