A Newly Published Controlled Study Suggests Promising Results In Antioxidant Supplementation And Adult Down Syndrome With Dementia

A newly published study, in the Journal of Alzheimer, investigating the association of seizures and cognitive decline, dementia in adults with Down Syndrome yields promising results for those who incorporate anti-oxidant supplementation. Expanding on this study, Nutri-Med Logic Corp states that anti-oxidant supplementation, in such cases, would have to be the type capable of passing the Blood-Brain Barriers.

Miami, Florida (PRWEB) January 11, 2012 -- Nutri-Med Logic Corp: A two year controlled study of anti-oxidant supplementation for dementia in individuals with Down Syndrome, by the Department of Neurology, University of California, Irvine, suggests a strong association of seizures with cognitive decline in individuals (demented) with Down Syndrome.

Dr. Ira Lott, a past Chairman of Department of Pediatrics and Neurology as well as Associate Dean of Clinical Neuroscience at University of California, Irvine, and a principal investigator of this study has previously pointed to high levels of oxidative stress in those with Down syndrome.

Dr. Lott states that certain abnormalities in mouse model Down Syndrome are also found in human models and, further, genes implicated in Down Syndrome (chromosome 21) are associated with oxidative stress and demise of the neurons (apoptosis). Furthermore, the excessive oxidative stress may directly contribute to the pathogenesis of Alzheimer in Down Syndrome patients. (1)

Excessive free radicals and their subsequent oxidative stress ultimately may damage mitochondria (cellular energy plant) and a "damaged mitochondria" is one of the hallmarks of Alzheimer, not only in Down Syndrome patients, but also in whole.

According to Dr. Lott, anti-oxidant supplements (diets) have not produced uniform results. (1)

Nutri-Med Logic states in choosing an effective anti-oxidant supplementation, one has to, first, determine if the anti-oxidant would be capable of passing the blood-brain barrier; then, if it possesses the ability to pass the cellular membrane (fat) as well as the cytosol (liquid) in order to reach the mitochondria.

R-Alpha Lipoic acid (also known as R-Lipoic Acid) is a biologically significant (active) compound, produced by human body, that amongst its many other vital properties inactivates the lipid peroxides, reactive oxygen species and reactive nitrogen species, which cause mitochondrial dysfunction. (2)

In animal studies, R-Alpha Lipoic Acid has easily crossed the blood-brain barrier. Oral doses of 10 mg/kg of R-Alpha Lipoic Acid in rats reached peak levels in the cerebral cortex, spinal cord and peripheral nerves within 30 minutes of administration. Daily supplementation of R-Alpha Lipoic Acid reached all areas of the central / peripheral nervous system and decreased lipid peroxidation (about 50%) in the brain and sciatic nerve tissue. (3,4)

R-Dihydrolipoic Acid, (the reduced form of R-Alpha Lipoic Acid) because can pass through cellular membrane, easily reaches the mitochondria, where it shifts -SH-S-S- to the reduced state, thus, also improving
the cellular energy homeostasis. (5)

R-Lipoic Acid is hydrophilic (liquid soluble) and lipophilic (fat soluble) and easily penetrates cell membranes and reaches high intracellular concentrations within 30 seconds of its administration. (6)

In conclusion, Nutri-Med Logic Corp agrees with this recent study relating to anti-oxidant supplementation and adults with Down Syndrome, Dementia and its potential progression to Alzheimer but adds that the ideal anti-oxidant supplementation has to retain the inherent ability of not only reaching the brain but also reaching the mitochondria.

Nutri-Med Logic Corp. is a producer of dietary supplements, including a Pharmaceutical Grade R-Alpha Lipoic Acid, the anti-oxidant dietary supplement of choice for the Diabetics, in Germany for more than 40 years.

Nutri-Med Logic Corp is also producer of a Natural, Balanced, Deodorized and Concentrated Omega-3, which is also a Pharmaceutical Grade Omega-3; Producer of PolyEnylPhosphatidylCholine (PPC 425mg), an extract of soy and the recommended dietary supplement for those with Fatty Liver and Alcoholic Liver Disease, in Europe for about 50 years;

Nutri-Med Logic's products are Formulated Based on Nutritional Logic, made from the highest quality raw materials that are manufactured in pharmaceutical facilities, encapsulated in pharmaceutical facilities and packaged in pharmaceutical facilities.

It must be noted that the studies, sources or statements above or below have not been evaluated by The FDA and, thus, one should not relate the cause of any diseases, stated herein, to lack of the dietary supplements, stated herein, nor equate their supplementation to prevention, treatment or cure.


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