

Low Dose Lipoic Acid Mineral Complex to Potentiate the Immune System

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Introduction

- ❖ Lipoic Acid Mineral Complex (LAMC) is a potent redox molecule that has been demonstrated in 15 peer-reviewed articles to target the mitochondria and potentiate aerobic metabolism as well as quench harmful reactive oxygen species.
- ❖ Eleven clinical studies (7 of which have been IND safety and/or clinical fatigue) have demonstrated a strong safety profile for LAMC.
- ❖ Clinical observations in HIV and Lyme disease have demonstrated improved QOL, fatigue and blood work using 4 tsp of LAMC daily for a minimum of 2 weeks.
- ❖ During the COVID crisis there has been a renewed focus on potentiating the immune system, in addition to alleviating fatigue. LAMC has been utilized at 4 tsp per day to attenuate fatigue in these recovering patients.

Background

- ❖ Lipoic Acid Mineral Complex (LAMC) is the most active ingredient in the dietary supplements Rejeneril-A and Cell-DOX.



- ❖ **Rejeneril-A** is the maximum dose LAMC, with vitamin A, utilized to provide energy during treatment or recovery from illness.
- ❖ **Cell-Dox** is prepared at a maintenance dose with additional B-complex vitamins. This daily-use formulation is designed to provide mitochondrial support and protect cells from free radical damage.

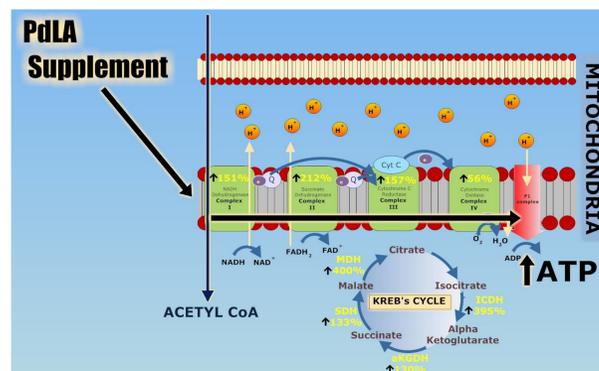


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What is LAMC?

- ❖ In the Lipoic Acid Mineral Complex (LAMC) the transition metal palladium is bound to the anti-oxidant alpha-lipoic acid, creating a potent redox polymer that is fat and water soluble.
- ❖ In addition to PdLA, this proprietary blend is formulated with minerals, vitamins and amino acids such as molybdenum, ruthenium, thiamine, riboflavin, cyanocobalamin, and formyl methionine.

Energy Production



- ❖ PdLA facilitates aerobic metabolism. Since thiamine and lipoic acid act as cofactors in the conversion of pyruvate, at Complex I of the mitochondria, this targets LAMC's energy to the aerobic cascade. Therefore, studies focus on LAMC as a metabolically-targeted therapy.

Clinical Innovation

- ❖ In this project, Physician Assistant Dave Conway utilized a low dose of LAMC (4mL/day, Cell-DOX, provided by Alimental Science) in his geriatric patient population to alleviate fatigue. His clinical observation demonstrated that, after two weeks, this low dose of LAMC potentiated the immune system in his chronically infected patients, allowing them to now respond to clinical intervention.

Case Studies #1

- PH is an 83 y/o male with history of Hypertension, Coronary Artery Disease, Hypercholesterolemia, Parkinsonian Syndrome, Vitamin deficiencies and more importantly two massive Ischemic Strokes in 2017 that resulted in left sided weakness and dysphagia.
- As a result of the CVA's, PH elected to have a G-Tube placed in order to receive his nutrition. He has been receiving Jevity 1.2 cal and Pro-Stat Liquid protein. He was also receiving Vitamin B-12 injections 1,000 mcg every month and a liquid multivitamin.
- Sequelae: Chronic Respiratory infections, skin infections from the G-Tube site and oral infections.

RESULTS:

- In 2018 he had a reaction to the multivitamin and was removed.
- We started him on daily low dose for fatigue.
- What I have noticed since...
 - Decrease in respiratory infections
 - Skin infections have resolved
 - Oral infections have been resolved

Case Studies #2

- JC is an 88y/o male with history of HTN, CAD, Hypoalbuminemia, GERD, Depression, Gout, Chronic Pain, Dysphagia, Oral Thrush and Hx of Throat/Esophageal Cancer. Social Hx of Smoker 1p/day for 25 years.
- In 2016, 4 large tumors were removed from the esophagus and trachea resulting in placement of a tracheotomy and G-Tube. He has been receiving TWO CAL and Pro-Stat Liquid protein. He was also receiving a liquid multivitamin.
- Sequelae: Chronic Respiratory and Tracheal infections, skin infections from the G-Tube site and oral infections.

RESULTS:

- We started him on daily low dose LAMC for fatigue.
- What I have noticed since...
 - Decrease in respiratory and tracheal infections
 - Skin infections have reduced significantly
 - Oral infections have reduced significantly

Recommendation

- ❖ Mitochondrial support is critical to facilitate patients' recovery and QOL. While up to 4 tsp per day (Rejeneril-A) was necessary during periods of acute illness and infection, these case studies demonstrate that low dose LAMC (Cell-DOX) is sufficient to boost immune function and potentiate treatment regimes.