TMC Enterprises
Tim Chapman, MD.
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Global Challenges in Nutritional-Energy Inadequacy Create Enormous Opportunities For Effective Bio-Energetic Product Synergy

*Enter **Sigma-tau's** Multi-Functional, **AminoCarnitine®** Armentarium with Research Validation and Inscrutable Scientific Credibility*

We are all integrally involved with the global systems of interdependence in financial complexities, population stabilities and the essential core requirement for individual health and wellness: **Energy Sufficiency** and **Redox Balance**, ie: *Cellular ATP Supply* and *Oxidative/Reductive Stress Homeostasis*. Whether individuals are involved in minimally, physically demanding activities or excessively high-output, physically-strenuous athletic performance, we all metabolically function optimally with adequate energy availability and effective intracellular **Oxidative Balance**. ***70-80%*** of all individuals are "**ATP-Insufficient**" or *energy deficient* and ***10%*** of these individuals are *Energy-Depleted* (**ATP-Starved)**. The large majority of all **Reactive Oxygen Species** (ROS) or "**Free-Radicals**" are generated through *Mitochondrial Metabolism* or *ATP-Generating Physiology;* hence the *"Oxygen Paradox,"* ie*:* We require oxygen to survive, but it is the oxygen-essential in ATP-production created in mitochondrial metabolism that creates 90% of all **ROS** or "**Free-Radicals**." The continual metabolic requirement for "**Energy or ATP**" availability is required continually in millions of enzymatic cascades, cell-membrane function, cellular proliferation, protein synthesis, and optimal immune system activity.

Scientifically, we are on the cusp of the exciting frontier of **Energy Medicine**; not only mitochondrial and cellular ATP creation; but in the realm of *Quantum Physics*, and sub-atomic energy, "super-string energy-generation" and its wave-frequency enhancement. In this area we see the resultant "*metabolic ingredient synergy*" or "Multi-Functional" activity panorama of the **AminoCarnitines®.** With these observations, **Sigma-tau HealthScience** has investigated and scientifically recognized multiple-significant activities in their "**AminoCarnitine®**" supplements:

1. **Potent Anti-oxidant Function**: Helping to balance the most-often seen imbalance secondary to *Free- Radical* excesses.
2. **Enhancement and Effective Increase in Fatty Acid Metabolism**: Effective support for intra-mitochondrial transport of energy-producing, long-chain fatty acids. This

Phone: (949) 433-3679, Email: tmcjrmd1@juno.com

produces improved triglyceride levels, reduced body fat and an increased available energy source.

3. **Increased Nitric Oxide** (NO) tissue levels: A significant non-steroidal, signaling hormone, NO improves nutrient and oxygen availability to cellular metabolic function through improvement in the rheological parameter of ***vasodilatation***.

Sigma-tau's Research and Development Company in Pomezia, Italy has developed premier "**Metabolically, Multi-functional, Energy-Generating L-Carnitine** Products," ***The AminoCarnitines®***. These products are proficiently distributed and scientifically supported throughout the USA by *Sigma-tau HealthScience*. Sigma-tau has developed a strong scientific support system in the superlative work done by Dr. Richard Bloomer, Ph.D, Associate Professor of Sports Medicine and Head of the Cardio-Respiratory and Metabolic Laboratory at the University of Memphis; and Dr. Patrick Jacobs, Ph.D in Exercise Physiology; Associate Professor in the Department of Exercise Science and Health Promotion at Florida Atlantic University.

At an economically-stressful time where nutritional complement/supplement cost-effectiveness is necessary, the choice for scientifically validated and supported products is essential. When we as a nation are engendering continuous and excessive oxidative stress imbalance, metabolic syndrome disease proliferation and its lipid-profile imbalances and significant energy deficiency, multi-functional, bio-energetic complements/supplements are almost mandatory. The ***AminoCarnitines®***, **GlycoCarn**® and **ArginoCarn**® are two of *Sigma-tau's* armamentarium in their ***AminoCarnitine®*** series and these products have shown to improve all three significant areas of metabolic imbalance (Anti-oxidation, Fatty Acid metabolism and NO production with resultant vaso-dilatation) and help re-establish cellular health and recovery through "*allostasis*" and ultimately, **Core Cellular Homeostatis through Energy-Synergy**.

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Integrative Nutritional Medicine