Membrane lipid replacement with glycerolphospholipids to restore mitochondrial function and reduce fatigue and pain in CFS/ME and fibromyalgia patients

Loss of function in mitochondria, the key cell organelle responsible for most cellular energy production, can result in cell death, excess fatigue, pain and other symptoms that are common problems in almost if not every chronic disease. At the molecular level reductions in mitochondrial function occur when there is loss of mitochondrial maintenance of inner membrane trans-membrane potential due to oxidative damage by Reactive Oxygen Species (ROS), resulting in reduced efficiency of the electron transport chain and less generation of ATP. Membrane Lipid Replacement (MLR) using an all-natural nutritional supplement mixture containing membrane glycerolphospholipids can be used to repair mitochondrial inner membranes, improve mitochondrial function, reverse ROS damage and increase the efficiency of the electron transport chain. Recent clinical trials with CFS/ME and FM patients have shown the benefits of MLR in enhancing mitochondrial function, reducing fatigue and improving mood and cognition. Mitochondrial function and inner membrane trans-membrane potential have been enhanced by 25-35%, resulting in decreases in fatigue by 35-45% in clinical trials. We have also been using MLR to help reduce pain in FM patients and return blood lipids and homocysteine levels to their normal range. MLR helps reduce, mobilize and remove cholesterol, which may contribute to pain in FM by impairing microcirculation and contributing to tissue ischemia.

Biography
Garth L Nicolson, PhD, MD (H) is the President, Chief Scientific Officer and Professor Emeritus at the Institute for Molecular Medicine in Huntington Beach, California. Having published over 675 medical and scientific papers, including editing 20 books, he has served on the Editorial Boards of 30 medical and scientific journals. He has won many awards, including the Burroughs Wellcome Medal, Royal Society of Medicine (London), Stephen Paget Award, Metastasis Research Society, US National Cancer Institute Outstanding Investigator Award, and Innovative Medicine Award (Canada). He is Colonel (Honorary) of the US Army Special Forces and US Navy SEAL (Honorary) for Armed Forces and veterans’ illnesses.

gnicolson@immed.org

Notes: