



## The Truth About Aging And Your Body

### 5th Annual Nutrition and Aging Symposium

By Prof. Garth L. Nicolson

Department of Molecular Pathology,  
The Institute for Molecular Medicine,  
Huntington Beach, California



[www.immed.org](http://www.immed.org)

An Interview given to [www.ntfactor.com](http://www.ntfactor.com)

Professor Nicolson, by the time this newsletter goes to print, you will have been a featured speaker at the 5th Annual International Academy on Nutrition and Aging Symposium.

#### Can you share the topic of your presentation?

My presentation at the International Academy on Nutrition and Aging will be on Lipid Replacement Therapy and its use in restoring mitochondrial structure and function and decreasing fatigue in middle aged and older people. When people age, their mitochondria, the little batteries inside each and every cell, become less productive in terms of their production of high-energy molecules needed for life and metabolism. Without enough high-energy molecules our bodies will eventually run down and start to degenerate or slowly decay. One perception of this is less energy for normal daily functions or fatigue. Also, the mitochondria play an important role in maintaining the life of each cell, and when our mitochondria become damaged, this starts a process called "programmed cell death." Eventually cells will start dying, and this is the start of the end of life process.

#### What does the term anti-aging really mean?

Anti-aging strategies attempt to put off the end of life biochemical changes as long as possible and enhance our ability to live longer. We know that mitochondria are involved in this process, and one of the most significant events is the oxidation of vital structures with age, such as mitochondria and genetic material, specifically DNA and specific genes that regulate life processes. When these are damaged, usually by oxidation, the function of certain genes as well as the function of our energy-producing mitochondria are altered. To prevent this different strategies have been proposed, but most of these are designed to reduce the damage to vital cell structures involved in aging.



#### Why is Lipid Replacement Therapy so important for anti-aging?

The cell nucleus and cell mitochondria are surrounded by protective lipid-protein membranes. The lipids are actually specialized lipids that form electrical barriers in certain cellular structures, such as mitochondria, and these barriers are essential to the function of the mitochondria and their production of high-energy molecules. With aging and disease these specialized lipids are damaged, usually by oxidation, and this can decrease energy production by the mitochondria and cause damage to our DNA. Lipid Replacement Therapy is a completely natural way to use our normal food processing mechanisms to provide specialized lipids to cells in a way that

prevents the oxidation and damage of lipids as well as DNA. Using the normal cellular mechanisms of lipid replacement, the specialized lipids replace the damaged lipids and return organelles like mitochondria to their optimal energy producing efficiencies. In addition, animal studies have shown that mitochondrial DNA is also protected by the specialized lipids delivered to cells and, in turn, nuclear DNA and critical genes are also protected.

### **You recently did a scientific study on the effects of Lipid Replacement Therapy with a Glycophospholipid-Antioxidant-Vitamin Formulation and found something very exciting relative to anti-aging. What did you find?**

We found that in middle-aged as well as in aged subjects taking an oral natural lipid supplement plus vitamins and antioxidants that fatigue was reduced within one week by a mean of approximately 37%, a highly statistically significant result, in a group of 67 subjects of mean age 57.3 years with various fatigue levels. Previously we found that fatigue could be reduced to this and even greater levels, but the process took longer, approximately 4-6 weeks. With this new formulation, we found significant reductions in fatigue in just one week.

### **Is it possible that fatigue can really be reduced that dramatically in one week? How is that possible?**

We were actually surprised that fatigue was reduced so much in just one week after taking our new lipid-vitamin-antioxidant supplement, Propax Gold with NT Factor. However, in retrospect the natural NT Factor supplement provided just the right combination of undamaged lipid nutrients along with vitamins, minerals and antioxidants (such as vitamin C and coenzyme Q10) to dramatically increase mitochondrial function and reduce fatigue.

### **Why do fatigue and aging seem to go hand in hand?**

As we age, our mitochondria become damaged, usually by oxidation of mitochondrial membranes, and less high-energy molecules are produced. This is what causes, along with in some cases psychological causes, what we perceive as fatigue.

### **If people start on Lipid Replacement Therapy, are they actually reversing aging?**

They can certainly prevent some of the cellular damage associated with aging and in some cases reverse this process. We have seen this in terms of mitochondrial function, where aged individuals returned their mitochondrial function to those found in 30-year olds.

### **It sounds too good to be true! It's almost as if you've discovered the fountain of youth!**

This is not a fountain of youth, but a sensible, scientific way to prevent damaged that normally occurs with aging, and to a certain degree reverse damage that has occurred with aging.

### **Who should begin Lipid Replacement Therapy?**

Anyone who is interested in restoring their mitochondrial function to a 30-year-old and decreasing fatigue that occurs normally with aging. Also, in essentially every chronic disease and many acute diseases excess damage occurs to cellular membranes and lipids. This may be why fatigue is the most common complaint of patients seeking general medical care in North America. Lipid Replacement Therapy is useful for all of these patients in helping them return to their pre-illness conditions.

### **About the Author:**

Professor Garth L. Nicolson is the President, Chief Scientific Officer and Research Professor at the Institute for Molecular Medicine in Huntington Beach, California. He is an Emeritus Professor of Pathology and Laboratory Medicine. Professor Nicolson has published over 600 medical and scientific papers, edited 16 books, and served on the Editorial Boards of 30 medical and scientific journals and

was the senior editor of four of these. Professor Nicolson has won many awards, such as the Burroughs Wellcome Medal of the Royal Society of Medicine (United Kingdom), Stephen Paget Award of the Metastasis Research Society, the U. S. National Cancer Institute Outstanding Investigator Award, and the Innovative Medicine Award of Canada. He is also a Colonel (Honorary) of the U. S. Army Special Forces and a U. S. Navy SEAL (Honorary) for his work on Armed Forces and veterans' illnesses.

1800-982-9158

[www.ntfactor.com](http://www.ntfactor.com)

Network With Us



Forward  
to a Friend >

**© 2011 Nutritional Therapeutics, Inc. All Rights Reserved**

These statements have not been evaluated by the FDA. These products are not intended to diagnose, treat, cure or prevent any disease. The information provided on this site is for informational purposes only and is not intended as a substitute for advice from your physician or other health care professional or any information contained on or in any product label or packaging. You should not use the information on this site for diagnosis or treatment of any health problem or for prescription of any medication or other treatment. You should consult with a healthcare professional before starting any diet, exercise or supplementation program, before taking any medication, or if you have or suspect you might have a health problem. You should not stop taking any pharmaceutical product without first consulting your prescribing physician.

This email was sent to: [REDACTED]

This email was sent by: Nutritional Therapeutics, Inc.  
63 Mall Drive Commack, NY 11725 United States



We respect your right to privacy - [view our policy](#)

[Manage Subscriptions](#) | [Update Profile](#) | [One-Click Unsubscribe](#)