

NUTRITIONAL SUPPORT FOR ANTI-AGING AND AESTHETIC MEDICINE

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Natural Medicine has found favor in medical spas and anti-aging practices that focus on beauty and physical appearance. The concept of “inner beauty” has emerged with great strength as modern science defines increasingly the importance of general body health as the key determinant of a youthful, attractive appearance. Oral supplements are quite complementary and perhaps more effective than natural substances used in topical formats. These circumstances have led to advanced nutraceutical technology that has created a range of “beautyceuticals” that are delivered in oral or topical format. The value of REDOX balanced antioxidant treatments is more apparent when antioxidants are given systemically, rather than when they are administered by topical means. Signs of skin aging are promoted by oxidative stress and amplified by physical insults such as excessive sunlight exposure and substance abuse. Carefully defined synergistic formulations of nutrients and botanicals that support skin, hair and nail structure and function are available in innovative nutraceutical formulations. Botanicals, such as Polypodium, have found a special role in the protection of the skin from UV radiation. There is extensive use of thalassotherapy, with the application of topical and oral seaweed-based products. Marine nutrients have been used in body-sculpting and supplements for weight control. Fucoxanthin is a powerful antioxidant found in certain seaweeds. This substance promotes the oxidation of fat by increasing Uncoupling Protein-1 (UCP-1) in white adipose tissue (thermogenesis); and it increases omega-3 fatty acid synthesis in the liver, while exerting important upregulation of glucose transporter 4 mRNA expression of L-6 myotubes, thereby controlling glucose uptake in muscles. These biochemical effects are valuable in the reversal of abnormal metabolism found in the Metabolic Syndrome X which is often present in mature females who seek aesthetic, medical interventions. Anti-aging medicine has incorporated many aesthetic procedures which cause iatrogenic trauma. The use of homeopathic Arnica and supporting nutrients to accelerate wound healing or trauma recovery following aesthetic procedures is now a very important intervention in recuperative medicine. Many individuals seeking aesthetic interventions have engaged in forced dietary restrictions which result in occult malnutrition. Correction of general nutritional deficiencies in individuals who seek surgical or laser techniques is very important and often overlooked in clinical practice. Many patients benefit from multivitamins combined in whole vegetable, fruit, greens and berry powders that contain important phytochemicals. Innovative technology exists for the systemic renewal and replenishment of collagen in the skin, by using synergistic formulations that include hyaluronic acid. The role of body cleansing in aesthetic medicine has become evidence-based when combined with positive lifestyle change including the restoration of restful sleep, aerobic exercise and good general nutrition. Modern concepts embrace the notion that “beauty lies within the body.”

GOALS & OBJECTIVES

- To discuss the role of nutrition and natural medicine in the support of anti-aging medicine with special focus on aesthetic procedures
- To review the evidence-base for specific nutrients or botanicals in the support and anti-aging and aesthetic medicine
- To provide evidence-based examples of intervention that have been supported in peer-review medical literature
- Attendees at this presentation will have developed an understanding of an evidence-based nutritional and botanical approach for the complementary management of medical aesthetic that are used in the practice of recuperative medicine
- Attendees will be given the most recent information on innovative nutritional or botanical approaches for the promotion of a youthful appearance
- Attendees will understand the importance of the promotion of general body health aesthetic medical practice by understanding the concepts of “beauty from within the body”

PATENTED ORAL GLUTATHIONE ACCELERATOR IMPROVES HORMONE VALUES & INFLAMMATION IN AGING AND HIV PATIENTS

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Glutathione is arguably the most important intracellular antioxidant in humans⁽¹⁾. It has been shown to decline with aging in human populations and the decline is accelerated in hospitalized age matched groups^(2,3). In addition, it has been reported that reduced levels of Glutathione are common in HIV infection and represent

an independent predictor of accelerated disease progression and death⁽⁴⁾. Furthermore, HIV and aging are both associated with decreased hormone and IgF1 levels and increased inflammation^(5,6). We, therefore, elected to study the impact of Glutathione supplementation with a patented oral Glutathione accelerator on intracellular Glutathione levels, Cortisol/DHEA ratios, IgF1 levels and inflammatory cytokine (TNF alpha) levels in a population of HAART treated HIV patients compared to a group of non HIV infected age matched normals.

Forty HIV subjects (aged 30-65) were compared with 15 age matched non HIV infected subjects. Measurements included intralymphocyte Glutathione levels, Cortisol/DHEA ratios, IgF1 levels and measurement of serum Tumor Necrosis Factor Alpha. All HIV subjects had stable CD₄ counts, were virally suppressed on stable HIV medicines for three months before entry.

Both HIV subjects and normal individuals demonstrated similar improvements. Intracellular Glutathione levels increased more than 200% in each group when baseline values were compared to values after 60 days of supplementation. In HIV patients, the average improvement in Cortisol/DHEA ratios was 44% (range 20-54) and in normals 38% (range 10-80), $p < .05$. IgF1 levels also increased in both groups (HIV 33%) (range 10-48) $p < .05$; (normal 39%) (range 18-49%) $p < .05$. In contradistinction, the inflammatory cytokine TNF alpha decreased in both groups. In HIV subjects the average decrease was 54% (range 20-84%) $p < .001$. TNF alpha was elevated at baseline (9.6 +/- 1.4 ng/dl) (normal <6) in all 41 subjects. In normal subjects, 11 of 15 demonstrated elevated TNF alpha levels at baseline (10.8 +/- 1.8) but the values returned to normal at 60 days. The average decrease in non HIV subjects demonstrating increased TNF alpha was 94% (range 20-250) $p < .0001$ after sixty days of supplementation.

These data suggest that supplementation with a patented oral Glutathione Accelerator improves hormonal balance and reduces inflammation in normals as well as HIV patients. Since increased Glutathione levels are associated with improved prognosis in HIV, these data suggest that improving intracellular Glutathione levels may have anti-aging effects in the general population and warrant further study

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STENT? BYPASS SURGERY? NO THANKS, PASS THE RED WINE! HEART DISEASE PREVENTION WITH THE MEDITERRANEAN DIET & LIFESTYLE

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The Toxic American Diet and Lifestyle

The toxic American diet and lifestyle leads to excessive cardiovascular morbidity and mortality. Our food is contaminated with pesticides and preservatives and contains an excessive amount of trans fat, saturated fat, high fructose corn syrup and sodium. We no longer exercise and chronic stress adversely affects the majority of Americans. The explosive rise in heart disease, stroke, high blood pressure, diabetes and obesity is directly linked to the food we eat and the lifestyle we lead. We have been lead to believe that the solution to this epidemic is to be found with medical or surgical intervention. Unfortunately, despite the billions of dollars we spend on health care, we continue to suffer and die unnecessarily from diseases that can be prevented.

I have been practicing preventive cardiology for more than twenty five years and have helped countless number of patients discover the real secret of long term health – an optimal diet and lifestyle. By following the principles of the Mediterranean Diet and lifestyle, expensive medications can be reduced or eliminated and risky surgical intervention can be avoided.

Why the Mediterranean Diet?

The Mediterranean diet has been shown to be the ideal dietary plan for long term heart health and weight control. I have utilized the principals of the traditional Mediterranean diet in my Miami cardiovascular disease prevention practice and adapted it to our modern lifestyle to successfully treat patients and greatly reduce their risk of heart attack, stroke, hypertension, diabetes and obesity.

How has the traditional Mediterranean diet been adapted? Nutritional science has introduced new and exciting ways to cook and prepare food. For instance, non-hydrogenated buttery spreads have been developed that can replace butter or margarine for cooking and baking. These spreads contain no trans fats and support heart health by providing omega-3 fat and plant sterols and stanols to our diet. Another example is the introduction of pomegranate juice which has been shown to lower blood pressure and help reverse the build-up of atherosclerotic plaque in our arteries. Nevertheless, the basic principles of a traditional Mediterranean diet remains unchanged – a wide variety of fresh whole non-processed food, frequently enjoyed with a glass of wine in a relaxed setting with family and friends.

Multiple clinical trials have demonstrated the beneficial impact of a Mediterranean diet and lifestyle on long term health and weight control. There are many theories which have been advanced to explain the benefit of a Mediterranean diet on heart health. Several popular theories are listed below:

- Scientific studies have linked the intake of saturated fat and trans fat to the development of heart disease. The consumption of saturated fat is limited in the Mediterranean diet and trans fats are not present. This is in stark contrast with the typical Western or American diet which contains an excessive amount of saturated fat and trans fat. Indeed, the Miami Mediterranean Diet offers a wide variety of delicious non processed whole foods that are consumed on a regular basis.

The Mediterranean diet also decreases inflammation. Current research has demonstrated the pivotal role that inflammation plays in the development and progression of heart disease, cancer, diabetes and an increasing list