



# Anti-Aging Therapeutics Volume XI

## Contents & Article Summaries

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ISBN 978-1-934715-02-4 (print & CD-ROM)

### Table of Contents

Chapter	Title and Author	Page
1	<p>Epigenetics and Immunosenescence Reversal: An Evidence-Based Longevity Paradigm <i>Karriem H. Ali, M.D.***</i></p> <p>There is a vast body of scientific literature indicating that immune dysregulation – specifically of the innate immune system – may be the determinative factor for the seemingly inevitable functional decline of advancing age. This dysregulation is characterized by a continual, low-grade, over-reactive state of systemic immune processes, which promote, in whole or in part, the pathognomonic signs of many of the chronic diseases that we associate with aging (e.g., cardiovascular disease, Alzheimer's disease, cancer, osteoarthritis, insulin-resistance, and diabetes).</p>	1
2	<p>Rice Bran Arabinoxylan Compound (RBAC) Immunomodulator Challenge: Strategic Inhibition of Carcinogenesis Initiation &amp; Propagation <i>Karriem H. Ali, M.D.***</i></p> <p>It is recognized that patients undergoing surgical oncology procedures can experience a suppression of cell mediated immunity and thus can be placed at an increased risk for metastatic spread of their malignancies. Several clinical trial and case reports have favorably documented the efficacy of Rice Bran Arabinoxylan Compound® (RBAC®) in altering the course of immunosenescence and enhancing immune function, specifically with regard to cancer cell killing activity as mediated by natural killer (NK) cells. The aim of this paper is to introduce RBAC as a prophylactic adjuvant immunomodulator to minimize or reverse perioperative immunosuppression.</p>	9

3	<p>Providing Integrative Energy in Cancer: Metabolically Targeted Therapy  <i>Francis J. Antonawich, Ph.D.***</i>                  Cellular metabolism provides the energy for genes and proteins to be made, which subsequently influences the metabolic rate of a cell. Metabolic dysfunction is at the heart of a multitude of clinical conditions, including cancer. This paper will focus on cancer as an example of how to use integrative energy to combat metabolic dysfunction. This approach may be viewed as a metabolically targeted therapy (MTT). One example of MTT is palladium lipoic acid complex (PdLA). PdLA is composed of the transition element palladium covalently bound to the antioxidant alpha-lipoic acid, which enhances its solubility. PdLA is the active ingredient in a dietary supplement called Poly MVA. PdLA has the ability to donate electrons to the mitochondria of the cell, and this appears to be the key to its physiological effectiveness. The aims of this paper are to: explore metabolically targeted therapies; to introduce the unique PdLA supplement Poly MVA; and to provide data to support using PdLA supplements to target metabolic dysfunction.</p>	13
4	<p>Recent Progress in Clinical Applications and Research in Fibromyalgia  <i>Robert W. Bradford, Professor Emeritus, D.Sc., NMD*</i>                  Fibromyalgia is characterized as a specific disease entity and, although the etiology remains controversial, significant progress has recently been made in alleviating the major symptoms of this malady. Similarities to a related disease, Chronic Fatigue Syndrome (CFS), are described. Therapies developed by the Bradford Research Institute and currently employed in the Ingles Integrative Medical Hospital and elsewhere are detailed along with the rationale for its high success rate. The formulations (1) Proprietary Stabilized Alkanylated Sulfur Compound and (2) Proprietary Stabilized Active Oxygen Carrier and their mechanisms of action are related to therapy. Other forms of therapy include live cell injection (transplantation), antioxidants, probiotics, acupuncture, aerobics, amino acids and other forms of dietary supplementation. A variety of conventional drugs have also been implemented as therapy.</p>	19

5	<p>Cognitive Decline of Aging: Important Neuroendocrinological Predictors of Early Cognitive Decline in A Clinical Setting  <i>Eric Braverman, M.D.*</i></p> <p>This paper sheds light on a hidden epidemic that is the precursor to widespread disease: mild-moderate cognitive impairment (MCI). Although it is commonly considered to be a consequence of the normal aging process, cognitive decline frequently begins as early as 30, starting with a slowing of processing speed that then affects memory and attention, and leads to numerous diseases including obesity and depression. Decades pass in this impaired state before the patient experiences the first clinical symptoms of dementia. The Brain Evaluation and Assessment Method (BEAM) for diagnosing cognitive impairment will be introduced, along with a new paradigm for “dementia” and how it develops. Potential methods for diagnosing, preventing, and reversing cognitive decline and the myriad diseases associated with it will be discussed.</p>	37
6	<p>Practical Application of Gene Silencing Theory of Aging: Life Extension in Animal Testing and Human Clinical Trials  <i>Stanislav R. Burzynski, M.D., Ph.D.*</i></p> <p>Genomic DNA can be compared to a biochemical computer. This computer is the same for all cells of our body, but the software is different for various cell types, and their stages of development. The epigenome constitutes the software that decides which part of the genome is active. The system of DNA methylation is generally acknowledged as the most important part of the epigenome, but chromatin remodeling and RNAi mechanism are additional important parts. According to the author’s theory of gene silencing, the expression of genes changes from almost all of them being active soon after conception, to less than 10% being active in old age. Based on our research in epigenetics and gene silencing, a group of peptides, amino acid derivatives, and organic acids, have been introduced for regulation of gene expression in aging including: 3-phenylacetylamino-2,6-piperidinedione (A10), phenylacetylglutamine (PG), phenylacetylisoglutamine (isoPG), phenylacetate (PN), and phenylbutyrate (PB). PG, isoPG, and PB were selected for further studies in animal models and human clinical trials. PG, isoPG, and PB can restore optimal gene expression in aging and increase longevity in experiments in honeybees. The anti-aging effect on the skin of a cosmetic cream containing PG and isoPG was confirmed by human clinical trials.</p>	47

7	<p>The Coming Pandemic of Liver Cancer: In Search of Genomic Solutions  <i>Stanislav R. Burzynski, M.D., Ph.D.*</i></p> <p>The principal cause of hepatocellular carcinoma (HCC) is a chronic viral infection, caused by hepatitis B virus (HBV), which is 100 times more contagious than HIV and currently infects an estimated 2 billion people worldwide. Both HBV and HCV-related HCC is associated with epigenetic gene silencing through DNA methylation and histone deacetylation (HDAC). Fortunately, both processes are reversible and medications are available and have been approved by the FDA for different indications. Phenylbutyrate (PB), which is present in dairy products, has also been approved by the FDA for the treatment of a rare variety of liver failure. PB, which is metabolized to antineoplaston AS2-1 in the liver, is both an HDAC inhibitor and a DNA demethylating agent. Studies by our team of the effects of metabolites of PB and the ingredients of AS2-1 on the entire malignant genome revealed inhibition of the expression of over 70 genes necessary for the survival of malignant cells. AS2-1 inhibits the growth of HCC in cell cultures and provided long-term remissions in HCC patients in Japanese clinical trials. Our team has successfully used PB together with other gene-targeted agents to achieve complete responses in patients with advanced HCC who previously failed standard regimens. We believe that by screening the general population for early markers of HCC and administering low doses of oral PB and Supplement A, HCC may be prevented.</p>	57
8	<p>Biobanking White Blood Cells for the Restoration of Immunity  <i>Dominique J. Charron, M.D., Ph.D.**</i></p> <p>More and more often, cells and tissues are being considered as unique medical bioresources in the ongoing development of regenerative medicine. The contribution of the immune system for adoptive immunotherapy was recognized in the 1990s, when donor lymphocyte infusion demonstrated an antileukemic effect of the transfused T cells. This led to the foundation and development of adoptive immunotherapy in the treatment and prevention of infectious diseases and cancer. The recognition that the immune system is undergoing a progressive deterioration with age introduces a new challenge. Immunosenescence results in a well-documented increase in incidence and severity of infections, impaired responses to vaccines, and the development of cancer. We propose that autologous white blood cells collected and cryopreserved represent a valuable bioresource for the restoration of immunity, and the successful development of adoptive immunotherapies in treating infections and cancer, particularly in the aging population. Such therapies will pave the way to anticipative medicine</p>	69

9	<p>Treatment of Bone Loss: Bisphosphonate Hazards and Safe Natural Therapies  <i>Phuli Cohan, M.D.***</i>                      Bone loss is a major public health concern. Bisphosphonate medications, considered the mainstay of treatment, are associated with osteonecrosis and spontaneous femoral fractures. Understanding normal bone metabolism provides the framework for the safe and effective use of hormones, vitamins minerals, diet, and exercise to prevent and reverse bone loss.</p>	77
10	<p>The Good, The Bad, and The Ugly: Life Extension Technologies for the 21st Century  <i>William Deagle, M.D.**</i>                      If we are to increase healthspan and promote longevity there are many things we need to consider. This paper will consider “The Good” –seven key principles which we need to advance if we are to achieve our aim as anti-aging physicians, “The Bad” – factors which are hindering our progress, and “The Ugly” – factors which are extremely detrimental to our health and need to be addressed as a matter of urgency. This paper will discuss these principles and factors.</p>	89
11	<p>Improve Personal Performance: Latest Science to Promote the Healthy Human Lifespan  <i>Nick Delgado, Ph.D.***</i>                      It is possible for anyone to achieve their genetic potential and reach their personal best by following a program of nutrition, exercise, supplementation, bioidentical hormone replacement, and by keeping a positive state of mind. However, to do so requires discipline, planning, training consistency, correct application of exercise principles, and motivation. The aim of this paper is to review the latest scientific research that will enable anti-aging physicians to help their patients reach their personal best.</p>	95
12	<p>Olympic Anti-Aging – Elite Sports Training  <i>Eduardo H. De Rose, M.D., Ph.D.*</i>                      This paper is concerned with the association between exercise and health throughout history. The history and future of sports medicine will also be discussed.</p>	99
13	<p>The Role of Non-Invasive Cosmetic Procedures in Anti-Aging Medicine  <i>Alex De Souza, M.D., MS, FACIP**</i>                      Until very recently, it has been the belief that a good facial rejuvenation or body rejuvenation could not be obtained without major surgery. However, with the technology that we have available to us today, it is possible to achieve results that are comparable to a traditional facelift without subjecting the patient to a major procedure. This paper will discuss modern techniques that can provide results very similar to those obtained by classic surgical treatments without the inconvenience and risks associated with major surgery.</p>	101

14	<p>Calcium Disodium EDTA Chelation Suppositories: A Novel Approach for Removing Heavy Metal Toxins in Clinical Practice  <i>Rita Ellithorpe, M.D.*; Tony Jimenez, M.D.; Brett Jacques, ND; Robert Settineri, MS; Larry Clapp, JD; Garth L. Nicolson, Ph.D.</i></p> <p>Heavy metals accumulate in various tissues and are associated with increases in today’s biggest killers: cardiovascular disease and cancer. Reducing these heavy metals from the body has been a challenge to modern day medicine. With the advent of intravenous EDTA chelation, it was possible to remove heavy metals, but this invasive method of heavy metal removal is burdensome and expensive. This review examines the rectal suppository method of chelating and removing toxic metals from the circulation and deposits in tissue storage sites, finding that such use has proved to be an innovative, effective and simple approach, saving time and money for the patient, and its efficacy and safety have been validated in pre-clinical and clinical studies.</p>	107
15	<p>Photothermal Therapy  <i>Joseph Georghy, M.D.*</i></p> <p>This paper is concerned with photothermal, or low-level light stimulation, therapy (PTT). PTT can be used to treat a wide variety of medical and non-medical conditions. The procedure is pain-free, requires no downtime, and can be performed on anyone – regardless of their age, race, or skin type. This paper will focus mainly on the cosmetic use of PTT.</p>	119
16	<p>Secretagogues: An Alternative to Recombinant Human Growth Hormone  <i>Mark L. Gordon, M.D.***; Erin F. Gordon; Alison M. Gordon; Rochelle H. Gordon; Sidharth Anand</i></p> <p>This paper will present current, evidence-based scientific literature, and clinical results to support the use of a secretagogue as a responsible “first step” approach to the treatment of GH deficiency in healthy individuals.</p>	125
17	<p>The Science Behind The Read Without Glasses Method™: How to Avoid Presbyopia, Sharpen Close Vision, and Reduce or Eliminate the Need for Reading Glasses  <i>Ray Gottlieb, O.D., Ph.D.*</i></p> <p>Whereas the loss of near focus (known medically as presbyopia) is accepted as fact, a natural result of aging, unavoidable after age 40+, the groundbreaking Read Without Glasses Method™ could help to reduce or even remove the need for reading glasses.. The the optical and physiological processes behind the Read Without Glasses Method™ are explored in this paper.</p>	133

18	<p>Emerging Frontiers in Cardiac and Vascular Treatment: Turning Adult Stem Cells Into Medicine  <i>Zannos G. Grekos, M.D., FACC***</i>                      The aim of this paper is to investigate the feasibility, safety, and clinical outcome of patients with ischemic cardiomyopathy treated with autologous angiogenic and cardio-regenerative progenitor cells (ACRPCs) in a prospective fashion.</p>	139
19	<p>The Science of Bioenergetic and Bioelectric Technologies: Cellular Mechanisms  <i>Steve Haltiwanger, M.D., CCN*</i>                      Cells and cell components are designed to both transmit and receive electromagnetic energies through both biological electronic circuits and wireless communication mechanisms. This paper addresses the concept of resonant frequencies, resonant energy transfer, the electronic properties of cells and tissues, and signal induction through resonant energy transfer.</p>	145
20	<p>Importance of Nutrition and Natural Medicine In Anti-Aging and Aesthetic Practices  <i>Stephen Holt, ChB, PhD, sDNM, FRCP (C), MRCP (UK), FACP, FAGG, FACN, FACAM, OSJ**</i>                      The aim of this paper is too discuss the role of nutrition and natural medicine in the support of anti-aging medicine, with special focus upon aesthetic procedures. Evidence supporting the use of specific nutrients or botanicals in anti-aging and aesthetic medicine will be reviewed, and the concept of “beauty from within the body” will be introduced.</p>	167
21	<p>Health Benefits of Whole Body Vibration  <i>Bill J. Johnson, M.D.*</i>                      This paper is concerned with a technology called Whole Body Vibration (WBV). Many people are more familiar with WBV than they first realize as WBV is the technology utilized by Power Plate® exercise machines. This paper will consider the physiology behind WBV, and will discuss its many benefits, including: strength and coordination benefits, hormonal benefits, and bone benefits.</p>	173
22	<p>Fractional Carbon Dioxide Lasers for Skin Resurfacing  <i>Bill J. Johnson, M.D.*</i>                      Fractional treatment treats hundreds of dots within a treatment area, leaving the majority of the skin surface intact. Fractional treatments have been available in ablative and non-ablative versions since 2006. In late 2007, the FDA approved several fractional CO2 laser devices. These lasers carry the promise of the “gold standard” result of the CO2 laser with the greatly diminished recovery time and discomfort of fractional therapy. Over the next few years, these lasers will set a new standard for resurfacing and become the treatment of choice for reversing the effects of aging on the skin. This article will review this evolutionary new procedure.</p>	179

23	<p>Counteracting Aging With Basic Physics  <i>Wolf-Dieter Kessler, M.D., Ph.D.; James L. Oschman, Ph.D.***</i>                  Very weak electromagnetic fields at the appropriate frequencies can be as effective, or even better, than other approaches for reducing inflammation, counteracting diseases, and enhancing longevity. The mechanism involves resonance, the process by which a field of a particular frequency or wavelength can transfer vibrational energy to an object. Clinical applications of electromagnetic resonance have the advantage that they can act at a distance using tiny fields that excite or energize natural processes taking place deep within the body. Resonance is based on simple and understandable biophysics that clearly explains why specific frequencies and not others are therapeutically effective. Two mechanisms are discussed here.</p>	185
24	<p>An Integrative Approach to Cancer Therapy: What Works?  <i>Shari Lieberman, Ph.D., CNS, FACN*</i>                  The aim of this paper is to dispel the myth that antioxidants interfere with chemotherapy and radiotherapy by reviewing the medical literature. The role of vitamin C as an adjunct to chemotherapy, and as a chemotherapy agent itself, will be discussed. Several cases supporting the use of Poly-MVA (lipoic acid-palladium complex) in the treatment of a number of different types of cancer will be presented.</p>	195
25	<p>A Review of Whole Body Hyperthermia  <i>Shari Lieberman, Ph.D., CNS, FACN*</i>                  Whole body hyperthermia (WBH) is the deliberate heating of the whole body to achieve an elevated core temperature of 41-42 degrees centigrade for a shorter time frame or (average of 2 hours) or 39-40 degrees centigrade (average of 4-8 hours). We review the therapeutic effects of WBH, including results of human studies. We then describe the WBH experience at Clinic St Georg, located in Bad Aibling, Germany, under the medical directorship off Dr. Friedrich Douwes.</p>	201
26	<p>Developing the Physician Based Medically Integrated Anti-Aging and Wellness Center of Today  <i>Daniel J. Lynch, MS*</i>                  This paper will introduce the concept of Medical Fitness Centers (MFC), which are an integral part of the health system. In addition, external factors that are affecting the healthcare environment will be considered.</p>	207

27	<p>The Effect of a Fruit and Vegetable Mix on Hypertensive Subjects and Its Potential as a High Compliance Alternative to the DASH Diet  <i>John H. Maher, D.C., FAAIM*</i></p> <p>The dietary modification called the “Dietary Approach to Stop Hypertension” a.k.a the DASH diet has been shown to significantly lower both systolic and diastolic blood pressure. Recent studies suggest that many nutraceuticals have potentially salubrious effects on hypertension. A pilot study was conducted at Logan College using a fruit and vegetable green powder mix drink that purported to provide levels of phytochemicals similar to the DASH diet. Results on blood pressure reduction displayed similar efficacy as the DASH diet. Considering the compliance hurdles implicit in the DASH diet, it is suggested that clinical investigation in the use of such phytochemical rich fruit and vegetable powders may be a reasonable science-based alternative treatment option for the physician.</p>	213
28	<p>The Effect of a Colostrum Extract of Proline Rich Polypeptides (PRP) On Immune Status in Guinea Pigs and Its Implications on The Potential of PRP in Aging Humans  <i>John H. Maher, D.C., FAAIM*</i></p> <p>Colostrum is the richest natural source of zoonutrients. Proline Rich Polypeptides (PRP) are active immune modulating zoonutrient peptides found in all mammalian colostrums. In particular, PRP are thought to modulate thymus function, specifically the T helper 1 / T helper 2 (Th1 / Th2) balance. Th1, which modulates cellular immunity, and Th2, which modulates humeral immunity, are classified on the basis of the cytokines they produce. This paper presents the ability of PRP from colostrum to modulate thymus / immune function in guinea pigs and the rationale for its use potential in humans as a nutraceutical for modulating immune function, especially in the aged and the distressed.</p>	223
29	<p>Achieving Permanent Weight Loss by Balancing Neurotransmitters and Hormones to Control Cravings and Hunger  <i>Daisy Meroy, M.D., Ph.D., FAAFP*</i></p> <p>Dieting and exercise are not sufficient to lose weight. Controlling hunger and cravings is vital if permanent weight loss it to be achieved. Therapies will be presented which target the location of the hunger (brain or stomach), the timing of the cravings, and the particular foods desired. Different neurotransmitter precursors are given to those patients plagued by obsessions with certain foods. Food addiction is as potent as drug, alcohol, tobacco, caffeine, gambling, sex, tanning, exercise, or internet use addiction. A balance in hormones is also necessary to achieve and permanently maintain weight loss. Finally, one diet does not fit all and questionnaires are provided to learn about each person’s problems. Only weight loss that is maintained is considered successful weight reduction!</p>	231

30	<p>Reverse The Effects of Our Toxic Environment Through Whole Food Purification  <i>Debra Muth, ND, BS, MS, RNC, APNP**; David Banes, Ph.D.</i>                  To fully appreciate purification and the combined roles of caloric restriction and nutrient density in health, this paper will provide an overview of environmental toxic exposures causing oxidative damage and stress. It will also provide a detailed discussion of the body's defenses against toxic exposure and oxidative stress.</p>	235
31	<p>Identifying and Treating the Root Causes of Depression, Fatigue, and Migraine Headache  <i>Cass Nelson-Dooley, MS**</i>                  Current treatments for depression, fatigue, and migraine headache fail to address the underlying causes of these conditions and usually require long-term medication without full resolution of symptoms. Laboratory testing of a patient's amino acids, neurotransmitter catabolic products, and food antibodies can be extremely helpful in efficiently treating the causes of these conditions. Abnormal amino acids and neurotransmitters have been associated with depression, migraine headache, violence, alcoholism, obsessive compulsive disorder, and fatigue. Foods can trigger migraine headaches and oligoantigenic diets have shown remarkable success in resolving migraine. Restoring immunological and neurological balance in patients relieves depression, decreases the frequency and severity of migraine headaches, and improves energy levels, without adverse side effects. Clinical cases will be presented with an emphasis on the biochemical patterns commonly seen in patients suffering with migraine headache, depression, and fatigue and how treating these biochemical abnormalities improves clinical outcomes.</p>	245
32	<p>A Comprehensive Lifestyle Intervention to Manage Menopause-Andropause and Improve Functions Affected by Aging  <i>Gary Null, Ph.D. **; Martin Feldman, M.D.</i>                  This paper will discuss the methods and results of the Menopause-Andropause Study, which evaluated the effects of a comprehensive lifestyle program on common symptoms of menopause and andropause, and various aspects of mental, physical, and energy functioning, and hair and skin status that may be negatively affected as we age. The lifestyle changes we studied encompassed diet and juicing, supplementation, exercise, stress management, and modification of behaviors and attitudes.</p>	259

33	<p>Mitochondria and Cellular Aging  <i>James L. Oschman, Ph.D.*</i>                      In terms of anti-aging medicine, we are interested in the factors that can restore and maintain adequate energy supplies and the circulation of energy within our bodies so that vital processes can continue to function optimally throughout our lives. This article considers the biochemical and biophysical aspects of energy production and utilization in the human body, the ways energetic “deficiencies” arise, and how they can be corrected. One focus is on providing metabolic energy to all parts of the immune system to maintain and even amplify the body's natural defense and repair processes. A second topic is the possible role of protons and electrons in energizing cellular processes. Finally, we consider the possible role of electrons in resolving chronic inflammation and maintaining the “inflammatory preparedness” of the organism.</p>	275
34	<p>A Restorative Model That Works: Integrating Hormones, Nutrition, and Detoxification  <i>Sangeeta Pati, M.D.**</i>                      This paper will present a restorative medicine model, which we have used for five years to restore optimal health to people suffering with fatigue, weight gain, low sex drive, anxiety, insomnia, fibromyalgia, rheumatoid arthritis, chronic fatigue, and many other problems.</p>	289
35	<p>Silver Sol and The Successful Treatment of Hospital Acquired MRSA in Human Subjects With Ongoing Infection  <i>Gordon Pedersen, Ph.D.***</i>                      The patented form of Silver Sol (US Patent # 7135195) has been shown to destroy bacteria, viruses, and mold both in vitro and in living systems.20 Staphylococcus aureus can be completely destroyed by Silver Sol in as little as two minutes and in vitro studies show it will stay dead for 28 days. Rustum Roy Ph.D. reported that strains of methicillin-resistant Staphylococcus aureus (MRSA) could be destroyed by Silver Sol treatment in vitro. The University of California Berkeley reports that Silver Sol can completely destroy in vitro forms of MRSA and Vancomycin resistant Enterococcus (VRE) at levels as low as 2.5 ppm in as little as 45 to 60 minutes. With MRSA continuing to mutate and sustain resistance to antibiotics, it is encouraging to report the findings from this study, which demonstrates an all-natural opponent to this modern day plague.</p>	295

36	<p>The Human Tripeptide GHK (Glycyl-L-Histidyl-L-Lysine), The Copper Switch, and The Treatment of the Degenerative Conditions of Aging  <i>Loren Pickart, Ph.D.***</i></p> <p>Human aging is marked by increased inflammation, a decline in tissue repair, and a deterioration of organ function. Externally, this diminution leads to wrinkles, photodamage, looser skin, bone loss, and other signs of aging. Growing old is also accompanied by a lessened resistance to infections. The human peptide GHK (glycyl-l-histidyl-l-lysine), as its copper 2+ complex (GHK-Cu), acts as an anti-aging activator for the late stages of tissue repair while also suppressing inflammatory cytokines. This unique molecule also increases resistance to infections. Results of an analysis of its actions on wound repair point to the existence of a biochemical copper switch that separates inflammatory and anti-inflammatory conditions. GHK may provide the key to improving organ rebuilding and maintenance. Furthermore, GHK-Cu's actions on stem cells suggest that it might be used systemically to drive the progression of dormant stem cells within organs into the types of differentiated cells needed for organ rebuilding and maintenance. It is also possible that it could increase the therapeutic success of externally administered stem cells.</p>	301
37	<p>The Clinical Use of Oral Serotonin Supplementation As An Adjunct to Effective Weight Loss  <i>Robert Posner, M.D.***</i></p> <p>This article discusses the science of serotonin, the affects of serotonin on eating behaviors and the clinical experience of using a patented oral serotonin supplement as part of the regimen in a highly successful weight loss program.</p>	313
38	<p>An Innovative, Integrative Treatment Protocol: The Individuality of Cancer and Cancer Treatment  <i>Mark A. Rosenberg, M.D.</i></p> <p>The incidence of cancer continues to rise at alarming rates in most westernized nations. Yet our management of advanced stage cancer is little more effective than it was twenty years ago. This article reviews the failures of current clinical approaches to cancer, and introduces an innovative, integrative treatment protocol that takes into consideration the individuality of cancer and its treatment.</p>	319
39	<p>Thyroid Hormone Deficiency: Diagnosis and Treatment  <i>Ron Rothenberg, M.D.*</i></p> <p>Thyroid hormone is still overlooked and underemphasized by many doctors, yet more and more people are suffering from hypothyroidism – a condition that can make life very hard for sufferers. Unfortunately, many of these cases of hypothyroidism go undiagnosed, and those that are diagnosed are often incorrectly treated. This paper will discuss the signs and symptoms of hypothyroidism, how to diagnose thyroid hormone deficiency, and methods of treatment.</p>	323

40	<p>Hormone Myths Versus Medical Evidence  <i>Ron Rothenberg, M.D.***</i>                  There are many myths surrounding hormone replacement therapies, from the notion that thyroid hormone is dangerous for the heart, to the widespread belief that growth hormone replacement therapy (GHRT) increases the risk of cancer. The aim of this paper is to review the current medical literature surrounding these myths and to demonstrate the safety and efficacy of hormone replacement therapies.</p>	329
41	<p>The Clinical Application of Naturopathic Alternative Therapy In the Treatment of Cancer and Chronic Disease  <i>Eric A. Scheinbart, M.D.***; Rene Broekhuysse, M.D.; Donna Miller, ND</i>                  Conventional medicine treats all cases of cancer in the same way – with cytotoxic chemotherapy drugs, radiotherapy, and surgery. However, “pseudo” cancers not affected by conventional cancer drugs or treatments, and when the cancer returns it returns with vengeance. The aim of this paper is to introduce a naturopathic alternative therapy for the treatment of cancer and chronic disease. Unlike the current conventional paradigm for the treatment of cancer, this naturopathic alternative therapy is non-toxic, causes no adverse effects, utilizes natural (not synthetic) products, is well-tolerated, and inexpensive. Furthermore, clinical experience has proven that this protocol improves patient outcome and quality of life</p>	337
42	<p>Mitochondrial Functional Analysis: A New Method for Assessing Anti-Aging Strategies  <i>Frank Shallenberger, M.D., HMD*</i>                  The author proposes that an early decrease in energy production that is ultimately responsible for the observed mitochondrial decay that is associated with aging. By recognizing this early decrease in energy production and reversing or improving it to youthful levels, it is possible to delay and even reverse the processes of aging and mitochondrial decay.</p>	341
43	<p>The Stem Cell Revolution: Research Advancements - 2008 In Review  <i>Ron Shane, Ph.D., OMD</i>                  At the Scripps Research Institute’s Distinguished Lecture Series 2008, a number of stem cell research experts discussed the potential for stem cell therapeutics to retard human aging and thereby enable the organism to experience a more prolonged period of optimal cellular homeostasis while abnegating its catabolic molecular activities. This research symposium examined the effectiveness of stem cell therapies in a diverse array of tissue sites in the human model. The overall theme of this conference was that medical science is commencing to comprehend how to reprogram cellular networks in terms of attenuating pathogenesis as well as improving physiological dysfunctionality.</p>	349

44	<p>Telomere Rejuvenation: Key to Health and Longevity  <i>C. Norman Shealy, M.D., Ph.D.***</i>                      Telomeres ordinarily shrink by 1% annually, from birth to death. The telomeres of people with unhealthy habits have much faster shrinkage, while those of people with the best habits and genes shrink at a slower rate, thus enabling such people to live to approximately 100 years. Ultimately, telomere health is a major determinant of health and longevity. Rejuvenation or regrowth of telomeres is, therefore, a major key to longevity and health.</p>	353
45	<p>The Effect of MRET (Molecular Resonance Effect Technology) Activated Water on Enhanced Tumor Resistance in Oncology  <i>Igor V. Smirnov, Ph.D.*</i>                      This article relates to a fundamental nature on how MRET (molecular resonance effect technology) Activated Water and its modified molecular structure, physical, and electrodynamic characteristics, may enhance specific molecular mechanisms in living cells. The research regarding the physical parameters of water confirmed that MRET treatment of distilled water leads to a substantial modification of the basic physical-molecular properties of water. The anomalous viscosity of MRET water (subject to very low tangent pressure) and electrodynamic characteristics of MRET water (subject to applied electromagnetic field of low frequency range) confirm the high level of long-range dynamic structuring of water molecules in polarized-oriented multilayer formations in activated water that are produced with the help of MRET activation process. This paper is concerned with the potential of MRET Activated Water as a possible agent for the prevention and treatment of cancer.</p>	355
46	<p>Potential Benefits of Resveratrol Supplementation for Optimizing Health and Preventing Chronic Disease  <i>James M. Smoliga, D.V.M., Ph.D.; Jeffrey Bost, PAC; Joseph C. Maroon, M.D.*</i>                      This chapter will discuss general information about polyphenols, with a focus on how resveratrol may improve human function. This discussion includes sources of resveratrol, benefits of resveratrol and the mechanism of action for these benefits, metabolism of resveratrol, safety issues, and information about commercial supplements.</p>	361

47	<p>Prostate Cancer As A Paradigm for Pro-active Integrative Management  <i>Stephen B. Strum, M.D., FACP***</i>                      A diagnosis of prostate cancer (PC) is, or should be, a flashing LED on the medical dashboard, urging an investigation of multiple linked systems. The real MD acts to integrate or orchestrate these various systems and milieu factors to create harmony and symphony, in contrast to imbalance and ill health. The aim of this paper is to propose an integrative approach to PC that embraces the above philosophy, and thus use PC as a paradigm for pro-active integrative management (PIM).</p>	369
48	<p>Fish Oil: Omega-3 Anti-Inflammatory – What, How, When?  <i>Selvaraj Y. Subramaniam, M.D.***</i>                      The aim of this paper is to introduce the understanding of systemic inflammation. Ultimately, we can tame the silent inflammatory fire within, to give us a better quality of life by slowing down biological aging as we age chronologically. This paper will explain what omega-3 is, and expound on its medical benefits, anti-inflammatory, and anti-aging effects. Particular emphasis will be placed on the usage of Omega-3 as an anti-aging medical therapeutic and the prevention of systemic inflammation.</p>	375
49	<p>Clinical Research Data on Cortisol Abnormality in Stress, Sleep, Immune System Disorders, and Obesity  <i>Paul Ling Tai, DPM, FACFS, ABPS**</i>                      This paper is concerned with cortisol and how stress, sleep, immune system disorders, and obesity, affect the production of this vital hormone. Methods of testing cortisol levels will also be considered.</p>	383
50	<p>Bauhinia, A New Breakthrough Natural Weight Loss Technology: A Clinical Double-Blind Study Report  <i>Paul Ling Tai, DPM, FACFS, ABPS***</i>                      This paper presents the results of an 8-week-long, double-blind, clinical study of the effect of Bauhinia – a plant from the Amazon forest – on weight loss.</p>	389

51	<p>Modern Day Coagulation Battles: The Early Unrecognized Coagulation Abnormalities and The End Stage Terminal Wars of Coagulation That Result in End Organ Damage - A Clinical Review and Trial of Another Anticoagulant Approach  <i>Raif Tawakol, M.D.***</i>                      Coagulation and anticoagulation balance the flow of blood and maintain the blood and its components within the confines of the blood vessels and capillaries. Drawing upon 25 years of cardiovascular experience, we have developed standards for testing and evaluating coagulation abnormalities. Using an extensive battery of 14 tests we identified a group of 49 patients who required intensive anticoagulant therapy in the form of a nutraceutical product. The results of therapy were unexpectedly favorable. The nutraceutical product reduced complications and improved outcomes, and unlike traditional anticoagulant therapy it did not increase fibrinogen levels.</p>	393
52	<p>Pre-Diabetes and A New Paradigm in Diabetic Management: Critical Factors for the Anti-Aging Physician  <i>Frederic Vagnini, M.D., FACS***</i>                      Pre-diabetes affects 57 million Americans. Recognizing and attacking this problem offers hope in preventing and reversing diabetes. It also offers hope in preventing the cardiovascular complications of both pre-diabetes and diabetes, as well as preventing dementia, Alzheimer's disease, and many cancers. This paper will outline a program for the anti-aging physician, including lifestyle changes, nutraceuticals, and the most up-to-date, aggressive pharmacologic therapy – a triple approach to control hyperglycemia, reduce insulin resistance, and preserve pancreatic beta cell function.</p>	399
53	<p>Qigong: The Ultimate Anti-Aging Exercise  <i>Regina Wolgel, MS, OTR/L***</i>                      Qigong is a series of gentle, ancient Oriental exercises which restore one's sense of well-being and vitality. The exercises are easy to learn and appropriate for any age or fitness level; many routines can be completed in less than 15 minutes. Qigong's purported health benefits include a healthy heart; normal blood pressure; overall strength, flexibility, coordination and balance; a strengthened immune system; focus and concentration; body-mind relaxation; and an upbeat mood. Future research will investigate the validity of these claims. Qigong is considered the anti-aging exercise that helps minimize disease and enhances quality of life. The focus of this paper is to review the basic concepts of qigong and Oriental medicine and present the purported anti-aging health benefits associated with this ancient healing art.</p>	405

54	<p>Anti-Photoaging by Astaxanthin for Skin  <i>Eiji Yamashita, Ph.D.</i> **</p> <p>Astaxanthin is widely and naturally distributed in marine organisms, including Crustacea (shrimps and crabs) and fish (salmon and sea bream). In fact, it is one of the oldest carotenoids to be isolated and identified from the lobster, <i>Astacus gammarus</i>, in 1938. Astaxanthin was first commercially used for pigmentation in the aquaculture industry. However, interest in astaxanthin began to grow after, the publication of two studies in 1991 which revealed that it possesses potent anti-oxidative properties and has a physiological function as precursor of vitamin A in fish and mammals (rats). In 1999, it was reported that astaxanthin does not possess any pro-oxidative properties like <math>\beta</math>-carotene and lycopene and in 2001, it was found that its potent anti-oxidative property is exhibited at the cell membrane. Astaxanthin has also been found to have anti-inflammatory and immunomodulatory properties, enhance sport performance and endurance, limit exercise-induced muscle damage, attenuate eye fatigue, and improve metabolic syndrome. In terms of dermatological actions astaxanthin has been shown to suppress hyper-pigmentation and it has been reported to inhibit melanin synthesis and photoaging, Here we report three clinical studies on photoaging as well as an in vitro study to evaluate quenching activities against <math>^1O_2</math>, the most photoaging ROS.</p>	409
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\* Denotes speaker at Spring 2008 Session of the Annual World Congress on Anti-Aging Medicine & Regenerative Biomedical Technologies;

\*\* Denotes speaker at Summer 2008 Session;

\*\*\* Denotes speaker at Winter 2008 Session.