

***17th ANNUAL INTERNATIONAL  
SYMPOSIUM***

***MAN AND HIS ENVIRONMENT***

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# **INTRODUCTION**

*Welcome to the 17th Annual International Symposium on Man and His Environment in Health and Disease. This Symposium is one of the most advanced forums in the world addressing the research and treatment of environmental effects on health and disease.*

*At this year's Conference, experts from throughout the world will share their extensive experience and specialized knowledge with an audience of physicians, scientists and health professionals.*

## **SPECIAL FOCUS**

*The 1999 Annual International Symposium will focus on the Environmental Aspects of Chronic Diseases, Finding the Causes & Cures with Drug Free Treatment. This Conference will explore some of the latest data and provide a forum for discussion as well as case studies to help the professional.*

## **GOALS OF THIS SYMPOSIUM**

- *To provide important new insights into the mechanisms, and the environmental causes behind many problems seen in your practice.*
- *To present new diagnostic and treatment modalities to help you improve the quality of care for your patients.*
- *To provide concepts and tools that will enhance your practice.*

## **OBJECTIVES OF THE SYMPOSIUM**

- *Improve the outcome of treating chronic diseases including: arthritis, cardiovascular, diabetes, cancer, depression, chronic fatigue, seizures, irritable bowel syndrome, recurrent G. I. upsets, and Crohn's disease with drug free treatments.*
- *Use new concepts and treatments to help better diagnose and manage many patients with chemical sensitivity.*
- *Apply the concepts of a longevity medicine to your practice.*
- *Use the information presented to enhance the effectiveness, cost-efficiency, and competitiveness of your practice.*

# **CONFERENCE FORMAT**

*The AEHF Committee has selected some of the leading experts in the field of Environmental Aspects of Chronic Diseases, Finding the Causes & Cures with Drug Free Treatment.*

*Each speaker's presentation will last approximately 20 minutes and will be followed by a 10 minute question and answer session. All speakers are encouraged to use any and all appropriate audio/visual aids. (A brief outline of the speech is included in this booklet.)*

*Every afternoon, we will have a case study/panel discussion. This session will consist of various faculty members discussing real cases. The audience is encouraged to participate in these discussions.*

## **GIVEN IN COOPERATION**

*William J. Rea, M.D., F.A.C.S.  
Symposium Chairman,  
American Environmental Health Foundation,  
Environmental Health Center - Dallas,  
Dallas, Texas*

*Alfred R. Johnson, D.O.,  
Bertie Griffiths, Ph.D.,  
Environmental Health Center - Dallas  
Dallas, Texas*

*Ervin J. Fenyves, Ph.D.,  
Department of Physics and Environmental Sciences  
University of Texas at Dallas  
Richardson, Texas*

*Nancy A. Didriksen, Ph.D.,  
Health Psychology/Behavioral Medicine  
Richardson, Texas*

*John Laseter, Ph.D.  
Accu Chem Laboratories  
Richardson, Texas  
Allan Lieberman, M.D.  
The Center for Environmental Medicine  
N. Charleston, South Carolina*

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- ***KLAIRE LABORATORIES INC.***
- ***R H OF TEXAS***

## ***1999 SYMPOSIUM FACULTY LISTING, SPEECH TITLES & BIOGRAPHY***

**Deborah Baird, M.D.** 972-412-3535  
5700 Rowlett Rd., Suite 130 Fax: 972-475-6892  
Rowlett, TX 75089

Title: "Immune-Disfunction in an Adolescent Resulting from Prenatal Exposure to a Toxic Chemical"

Board certified pediatrician, Graduate of Hahnmann of Medicine, Philadelphia, PA. Residency training in Psychiatry & Pediatrics at Medical College of Philadelphia. Fellowship in developmental Disabilities at Texas Scottish Rite. Private practice with emphasis in developmental hospital problems.

**Jan Patrick Baker** 210-349-5684  
LORD & Baker Associates Fax: 210-349-2414  
418 Dawnview Lane  
San Antonio, TX 78213

Title: "The Use of Vortices to Purify Water/Air"

Extensive experience in the area of environmental and health related impact of many different industrial processes. Mr. Baker has a B.S. in Industrial Technology from Southern Illinois University and a MS in System Management/Logistics from the University of Southern California. Owner of LORD & Baker Associates of San Antonio which manufacturers vortex separators.

**Malcolm Beck** 210-651-6115  
World Expert Composter, Garden-ville, Fax: 210-651-9231  
7561 E. Evans  
San Antonio, TX 78266

Titles: "Soil & Health" and "Healthy Soil=Healthy Plants=Healthy Humans"

Owned and operated organic farms, researched composting, materials and methods. In 1973 started a commercial compost operation. Researched and documented the use of compost and mulch made from waste that when used in the landscape could cut water needs in half and grow healthier plants with resistance to disease and insects creating fewer needs for pesticides. Founded Garden-Ville Fertilizer Co. which is headquarters for the organic grower.

**Daniel Beilin, O.M.D., L. Ac.** 831-685-1125  
Acupuncture, Oriental & Biological Medicine Fax: 831-685-1128  
9057 Soquel Drive, Building A, Suite B  
Aptos, CA 95003  
Title: "Basics of Thermography"

**Adrienne Buffaloe, M.D.** 212-355-2315  
Healthcare for the 21st Century, LLC, Fax: 212-355-4496  
964 Third Ave. 4th Floor  
New York, NY 10155

Title: "Environmentally Triggered Vascular Disease"

Medical Director of Healthcare for the 21st Century Environmental Medicine Center in New York City, a chemical-free center for the diagnosis and treatment of children and adults with chemical, inhalant, and food hypersensitivities. Graduate of Columbia College of Physicians and Surgeons. Trained in Emergency Medicine and Environmental Medicine.

**Yuriy Bukin, Ph.D.** 011-70-95-111-8329  
Cancer Research Center of Russian Academy of Medical Sciences  
Fax: 011-70-95-324-1205  
Kashirskoe shosse 24  
Moscow 115478 Russia

Titles: "Environmental Factors of Gastrointestinal Carcinogenesis"

Professor Bukin Yuriy, Ph.D., Graduated at Moscow State University as biochemist. At present, Chief of Laboratory for Inhibitors of Carcinogenesis at Cancer Research Center of Russian Academy of Medical Sciences (Moscow). Main area of scientific activity - the study of a functional role of vitamins and natural antioxidants in cancer prevention. An author of more than 150 scientific publications. Closely interacts with American specialists. Corresponding member of the AACR and some other international societies.

**William Croft, D.V.M., Ph.D.** 715-824-3756  
N9178 County Rd. A  
Crivitz, WI 54114

Title: "Detection and Diagnosis of Petrochemicals, Solvents in Animals and Man" and "Chronic Pathological Effects of Petrochemicals, Solvents, In Animals in Relationship to Man"

- 1975 graduated from University of Wisconsin, Madison, Ph.D. Medical Pathology.
- 1970-1980 Research pathology and toxicology in the Department of Human Oncology, University of Wisconsin Madison.

- 1980-1983 Faculty of University of Wisconsin, Madison, Department of Environmental Toxicology.
- 1983-Present Consultant in Environmental toxicology, working on "Sick Buildings" and other poisonous Health Modalities in man and animals.

**Nancy Didricksen, Ph.D.** 972-889-9933  
 100 N. Cottonwood Dr., Suite 106 Fax: 972-889-9935  
 Richardson, TX 75080

Title "Neuropsychological Effects of Solvent Exposures"

- Ph.D. in Health Psychology/Behavior Medicine from University of North Texas with research in psychoneuroimmunology.
- Approximately fourteen years evaluating and treating environmentally ill patients.
- Private practice in Richardson Texas evaluating and treating environmentally ill patients.
- Adjunct Professor of Psychology at University of North Texas.

**Ronald Finn, M.D.**  
 8 Prestwick Dr. 011-44-51-924-6657  
 Blundellsands  
 Liverpool L23 7XB England

Title: "Thoughts on a Cancer Epidemic"

Dr. Finn is currently in private practice and is a consultant physician for the Royal Liverpool Hospital of UK. He has served as president of the British Society of Allergy and Environmental Medicine. Received the Lasker Award in 1980.

**Roy A. Fox, M.D.** 902-860-0057  
 Nova Scotia Environmental Health Center Fax: 902-860-2046  
 P.O. Box 2130  
 Fall River, Nova Scotia B2T 1K6 Canada

Title: "Managing Environmental Sensitivities-The Importance of Nonphysical Approaches"

Dr. Fox was born in England, graduate of University of Newcastle upon Tyne. Trained in internal medicine at Royal Free Hospital, London & Immunology at Scripps Clinic & Research Foundation, La Jolle, California: Fellowship in Environmental Medicine at Dallas. Now Director of Nova Scotia Environmental Health Center. An author of more than 100 Scientific Papers. Currently completing Master's degree in Environmental Studies at Dalhousie University.

**Lester Friedlander, BA D.V.M.** 717-746-3072  
P.O. Box 534 717-746-1386  
Wyalusing, PA 18853

Titles: "Failure of Federal Inspection Procedures for Beef, Pork & Poultry; by U.S.D.A., H.H.S. (F.D.A. & C.D.C.), E.P.A. and OSHA" and "U.S.D.A. & F.D.A. Failure of Meat Inspection Process"

Dr. Friedlander is a noted speaker, lecturer, author, researcher, and consultant in veterinary medicine. He received his BA in biology at Northland College, Ashland WI. D.V.M. 1979 from Araneta University Foundation, College of Veterinary Medicine. He was a veteran for the U.S.D.A., FSIS from 1985 to 1995. After only two years with the U.S.D.A. he was named Veteran Trainer of the year for 1987.

**David Hickey, M.D.** 214-361-9979  
Sherry Lane Imaging Fax: 214-361-1310  
6170 Sherry Lane, Suite 100  
Dallas, TX 75225

Title "Computerized Regulation Thermography with Brain and Dental SPECT"

**Steven Hotze, M.D.** 281-579-3600  
Hotze Health & Wellness Center Fax: 281-579-3698  
20214 Braidwood Dr. #215  
Katy, TX 77450

Title: "Adrenal Fatigue in Allergy Patients" and "[Male Allergy Patients with Hypotestosteronemia: Long Term Treatment Results](#)"

Steven F. Hotze, M.D. is an allergist who practices medicine at the Hotze Health and Wellness Center which has two locations in Houston. Dr. Hotze received his medical degree from the University of Texas in 1976. He and his wife, Janie, have eight children. Dr. Hotze is a Fellow of the American Academy of Otolaryngic Allergy and a board member of the Pan American Allergy Society. He is also a member of the A.A.E.M. the TMA and the Harris Co. Medical Society.

**Richard Jaeckle, M.D.** 214-696-0964  
8220 Walnut Hill Lane, Suite 404 Fax: 214-696-1094  
Dallas, TX 75231

Title: "A Case Study of Aortitis and Dissecting Aneurysm"

Dr. Jaeckle is a native Texan from San Antonio who completed his medical training in Dallas, Psychiatry and Child Psychiatry in St. Louis with practice in Dallas the last twenty years, including ten years in environmental Medicine.

**Col. Danny Goodwin Jones.** Phone: 01267-290229  
Pencnwc, Felingwm ISAF Fax: 01267-290112  
Abergolech Road  
Carmarthen Wales SA 32 7 BA United Kingdom

Title: "The Use of Trace Elements in the Environment for the Prevention of Disease & Maintenance"

Early years spent on an organic farm prior to medical studies at Birmingham University. Recalled to manage a family farm later drafted into Army for service in communications and intelligence. Returned to stock farming in 1977 and developed trace element interests and research. Company Director, married, eight children, five in medicine and health care professions.

**Stuart Z. Lanson, M.D.** 602-994-9513  
Scottsdale ENT Surgeon, Fax: 602-994-3773  
Founder & Director  
7301 E. 2nd Street, Suite 106  
Scottsdale, AZ 85251

Title: "The Outcome of Study in 20 Compliant Patients with Chronic Illness w/o Drugs or Surgery"

Stuart Z. Lanson, M.D., is a practicing otolaryngologist in Scottsdale, Arizona with interest in the environmental aspects of health and disease. Dr. Lanson has published two research papers related to immune dysregulation and Candida overgrowth. Dr. Lanson is board certified in otolaryngology and most recently in environmental medicine. He is a fellow in the AAEM, American Academy of Otolaryngology-Head and Neck Surgery, and American Academy of Facial Plastic Reconstructive Surgery. He is also a licensed homeopathic physician.

**John Laseter, Ph.D.** 972-234-5577  
Accu Chem Laboratories Fax: 972-234-5707  
990 N. Bowser Rd., #800  
Richardson, TX 75081

Title: "Uptake and BioAccumulation of Common Industrial Chemicals"

- Doctorate in Biochemistry, 1968
- Professor of Biochemistry and Chairman Louisiana State University, New Orleans, 1969-1984
- Lab Director Accu-Chem Laboratories, 1983-Present
- Diplomat, American Board of Forensic Medicine

- Fellow, American Board of Forensic Examiners

**Allan Lieberman, M.D.** 843-572-1600

The Center for Environmental Medicine, Fax: 843-572-1795

7510 Northforest Dr.

N. Charleston, SC 29420

Title: "Alcoholism: The Genetic, Metabolic and Allergic Model"

Board certified in Environmental Medicine since 1988, Assistant Professor - Biochemistry at Brown University, Director of Center for Occupational Environmental Medicine, N. Charleston, South Carolina, Consultant in Clinical Research - MILKHAUS LABS. Special Interests: Biodetoxification, Organophosphate, Pesticide Toxicity

Jean Monro, M.D. Phone: 011-44-1442-261333

Breakspear Hospital Fax: 011-44-1442-266388

Belswains Lane

Hemel Hempstead, Herts HP3 9HP England

Title: "Syndrome X"

Dr. Jean Monro has a background in hospital general medicine and worked at the National Hospital for Nervous Diseases, London, researching migraine and multiple sclerosis. She entered full time practice in Environmental Medicine in 1982 and in 1988 established the Breakspear Hospital for Allergy and Environmental Medicine. She has many publications to her name and regularly speaks at conferences world wide. Her primary areas of interest are functional medicine and detoxifying enzyme pathways.

**Kalpanna Patel, M.D.** 716-837-1320

Northwest Center for Allergy & Environmental Medicine Fax: 716-833-2244

65 Wehrle Dr.

Buffalo, NY 14225

Title: "Newer Approaches For Detection of Water Pollution-Chemicals & Migraine"

Medical graduate of B.J. Medical College in Ahmedabad, India. Trained in Pediatrics at Bexar County Hospital, University of Texas; Health Sciences at San Antonio. Fellow of American Academy of Pediatrics, Fellow of AAEM, President of American Board of Environmental Medicine and Director of the Allergy and Environmental Health Center of Western New York. Maintains private practice in Buffalo.

**William J. Rea, M.D.** 214-368-4132  
Environmental Health Center - Dallas Fax: 214-691-8432  
8345 Walnut Hill Lane, Suite 220  
Dallas, TX 75231

Titles: "New Concepts On Cardiovascular Disease" and "Chronic Disease-New Concepts"

Graduated with an M.D. from Ohio State University College of Medicine in 1962. Board Certified in Environmental Medicine, Thoracic and General Surgery. Member of the AAEM, Pan Am Allergy Society, American Academy of Environmental Otolaryngic Allergy. Received the Jonathan Forman Fold Medal award and the Herbert J. Rinkel Award from the AAEM. Books: The author of Chemical Sensitivity, Volumes I, II, III, and IV; Your Home, Your Health, and Your Well Being, and Success in a Clean Bedroom.

**Russell J. Reiter, Ph.D.** 210-567-7000  
UT Health Science Center Fax: 210-567-6948  
7703 Floyd Curl Dr.  
San Antonio, TX 78284-7762

Titles: "Environmental Pollution: Role in Oxidative Stress & Protection by Melatonin" and "Aging & Susceptibility to Oxidative Damage"

Dr. Reiter received his Ph.D. in 1964 in Endocrinology. He is a research scientist and author with special interest in melatonin. Dr. Reiter has three honorary doctor of medicine degrees, numerous scientific awards; 950 scientific publications; editor of 36 books; author of seven books; on editorial board (past and present) of thirty-six medical journals.

**Sherry Rogers, M.D.** 315-488-2856  
Northeast Center for Environmental Medicine Fax: 315-488-7518  
2800 W. Geneses St.  
Syracuse, NY 13219

Titles: "The Scientific Basis Behind Reversing End-Stage Metastatic Cancer, Part 1 and Part 2"

General Information: (Education, Specialties, etc.) Private practice for twenty-eight years, published eighteen Scientific papers, eleven books, wrote environmental medicine chapter in Mosby's 1998 veterinary text book. Environmental medicine editor for Internal Medicine World Report and an environmental medicine reference newsletter.

**Wallace Rubin, M.D.** 504-888-8800  
Otology, ENT, Surgery Fax: 504-455-6796  
3434 Homma Blvd. #201  
Metairie, LA 70006

Titles: "The Effect of Chemical Sensitivity on the Respiratory Tract & Skin" and "The Effect of Chemical Sensitivities on the Inner Ear Causing Hearing & Balance Problems"

Private practice of Otolaryngology - Head & Neck Surgery since 1951. A clinical professor at Louisiana State University - School of Medicine Department of Otolaryngology Head & Neck Surgery and Biocommunication. Two primary, sub-specialty areas: Neurotology, Allergy Immunology. More than 130 publications. Invited guest a lecturer in United States and foreign countries since January 1962.

**Klaus-Dietrich Runow, M.D.** 0-56-24-8061  
Institute for Environmental Diseases, Fax: 0-56-24-8695  
Im Kurpark 1,  
D-34308 Bad Emstal, Germany

Titles: "Electrosensitivity" and "Dental Alloys - Toxic Metals!"

Klaus-D. Runow, Physician, Medical School Munich and Marburg; A student in the Environmental Health Center, Dallas, TX, (educated by Dr. Rea); Founder of the first German Institute for Environmental Diseases (IFU-Bad Emstal); 1989 finishing the "new" institute building (Eco Architecture); Assistant Professor University of Marburg; First German physicians certified from the Internat. Board of Environm-Med (USA) since 1994.

**Doug Seba, Ph.D.** 703-949-1055  
P.O. Box 1417, #323  
Alexandria, VA 22313

Titles: "Distant Dust and Ecologic Consequences" and "Environmental Update"

Dr. Douglas Seba has a Ph.D. in Environmental Marine Science from the University of Miami's Rosenthal School of Marine and Atmospheric Sciences. He has more than 40 years experience in Xenobiotic Chemicals in the Environment and their Health Effects.

**Theodore R. Simon, M.D.** 214-528-2482  
Nuclear Medicine Consultants of Texas Fax: 972-566-4762  
4429 Southern Ave.  
Dallas, TX 75202

Title: "Recent Developments in Functional Imaging"

1988-1990 Deputy Chief, Nuclear Medicine Service, National Institutes of Health

1980-present Associate Professor, Clinical Radiology, University Texas Southwest Medical School

1990-present Private Practice, Nuclear Medicine

1975 Yale University School of Medicine, MD.

## ***1999 SYMPOSIUM - ABSTRACTS***

### **ENVIRONMENTAL UPDATE 1999**

Douglas B. Seba

Independent Marine Scientist, Key West, FL

The environment is not in trouble. It has survived asteroid impact, continental drift and ice ages. What is in deep trouble is the life support system for humans and many other species. The environment has always been in a state of flux and most living species have a range of adaptation, that, if exceeded, results in extinction. Man is the first species to be able to deliberately alter the environment. It is important to separate potentially harmful man-made changes from natural perturbations and to seek to expand our range of adaptation.

The environment is composed of three elements: physical, biological, and chemical. There will be a quick review of new items in each of these fields during the last year that would be of interest to environmental physicians.

For example, the widening of the ozone hole over both poles of the globe or global warming would be physical examples. In the case of ozone depletion, this is a man-made event while global warming may be a natural event. Outbreaks of toxic algae (pfiesteria), mold (chytrid), or virus (Norwalk) are biological environmental changes that are probably a combination of man-induced and natural cycles. Broad adverse health effects caused by pesticides are totally a man-induced change in our chemical environment.

In each of these cases, environmental physicians can help in dual roles. In one instance, to mediate the effects of the ozone hole, they can lobby as a group to ban the use of chemicals that cause ozone depletion while on an individual basis counsel a patient to use sunscreen for protection.

Philosophically, this paper will focus on the fact that the environment will continue to change and debate should be on the health effects of these changes rather than their existence.

Most items are taken from contemporary news sources. Two good web sites with many links that can be used as entry points are [www.frogwed.gov](http://www.frogwed.gov); [www.panna.org/panna/](http://www.panna.org/panna/); [www.qc.ec.gc.ca/faune/faune/html/malformations\\_e.html](http://www.qc.ec.gc.ca/faune/faune/html/malformations_e.html); and [www.epa.gov/opptintr/opptendo/](http://www.epa.gov/opptintr/opptendo/)

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## **TRACE ELEMENTS IN THE ENVIRONMENT FOR PREVENTION OF DISEASE AND MAINTENANCE OF HEALTH FOR FARM ANIMALS, PART 1.**

**R. GOODWIN-JONES**

Trace elements (TE) are probably the most important factor in the production of healthy productive ruminants, unless the pasture of the ruminant is balanced with TE then fertility, resistance to disease and the production of meat, milk, and wool are adversely affected. TE also affect soil life, and plants, and the whole ecosystem depends on these vital elements which are present in very small amounts. A TE is defined as one which causes impairment of a vital function, or death, when its intake falls below a certain level and whose role cannot be undertaken by any other element. The biomass of the soil is immensely complex and is responsible for producing the nutrients for plants and the grazing animals. One square meter of soil to a depth of 6cm should contain approximately 75000 insects and small worms and 200 earth worms plus billions of fungi and single cell organisms. They should weigh about 1 ton per acre and on a permanent pasture may turn over around 15 ton of soil per year/acre. Nowadays this soil biomass is constantly degraded by modern farming methods. The imperative TE are cobalt, copper, zinc, selenium and iodine. Less important possibly are manganese, boron, molybdenum and chromium. The major nutrients, potassium, phosphorous, sodium, calcium, magnesium, iron, sulphur and chlorine are rarely in short supply and thus are unlikely to influence the performance of a ruminant to any degree. Ruminants are able to select by taste and smell grasses that contain appropriate amounts of TE and their grazing patterns are dictated by TE content of grasses. The trace element environment of the ruminant has clearly had a major effect on its genetic development. Different species and individuals within a species have different requirements of TE. Concentrations of TE in pastures depend on factors such as rainfall, altitude, aspect, base rock, temperature and geographical situation. Modern farming methods such as overuse of nitrogen fertilizers, lime, sulphur, and phosphorous plu a variety of herbicide and insecticide chemicals also reduce the TE availability. When TE are low in pastures animals consume much mor grass, which is much less nutritious, and they will suffer from more disease, and have fertility and production problems. Symptoms of TE deficiencies are many and obvious and these will be discussed in detail in part 2 of this series.

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**ALCOHOLISM: THE GENETIC, METABOLIC AND ALLERGIC  
MODEL**

**Allan Lieberman, M.D.**

**NOT AVAILABLE**

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**CHEMICAL SENSITIVITIES ON THE RESPIRATORY TRACT AND SKIN**

Wallace Rubin, M.D.

Symptoms related to ear, nose, and throat dysfunction often signal the onset of chemical sensitivity. Patients presenting with ear, nose, and throat symptoms are often in the beginning phase of disease, especially chemical sensitivity.

It is imperative that the physician when first treating these symptoms consider the possibility of environmental triggers in order to prevent continued deterioration, eventual spreading, and finally onset of end-organ disease.

Rhinitis, polyps, and recurrent sinusitis have been associated with allergic and environmental etiologies. Neglected or improperly treated ear, nose, and throat sensitivities result in either irreversible end-organ damage or the spread of sensitivities to other smooth-muscle systems and other body systems such as skin and neurologic systems.

Treatment for patients with chemical sensitivity with ear, nose, and throat involvement best utilizes a holistic approach that extends over a period of years. Although many measures presently used in conventional medical practice to treat these patients with ear, nose, and throat symptoms may be satisfactory on a short-term basis, the long-term outcome of these practices may not be beneficial to the patient's health.

For the chemically sensitive patient with ear, nose, and throat involvement, treatment that fails to reduce the patient's total body load and routinely utilize other environmental-control practices is simply incompatible with long-term wellness. Clearly, the best procedure for dealing with these patients is to search for environmental triggers and treat them accordingly.

My presentation with regard this subject uses two patient examples, one with problems regarding the respiratory tract and the other regarding problems with the skin. In each example the patient's complaints, evaluations, results of the evaluations, and the treatment regimes used to return these patients to normal function will be discussed.

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# **MANAGING ENVIRONMENTAL SENSITIVITIES: THE IMPORTANCE OF NON-PHYSICAL APPROACHES.**

**Roy Fox, M.D.**

**Nova Scotia Environmental Health Centre, Dalhousie University,  
Fall River, Nova Scotia. Canada**

It is obvious that in nature, of which man is a part, there is no single cause of any phenomenon, and that a causal network or causal web of factors in the environment and in the body interact to effect health<sup>1</sup>.

## **Observations**

We have found that one of the most important aspects of a patient's attendance at the NSEHC is validation of their illness experience. As we begin to help the patients with the many issues and challenges that they face in their lives most of the patients are able to progress from the perception of being ill and disabled to one of being healthy but environmentally challenged. Although initial stages of therapy for the most ill, inevitably result in some isolation and withdrawal from the workplace and society, the patients must be helped to move forward from this as soon as is practical. At this time people are helped by a holistic approach by competent professionals trained to work with the environmentally sensitive.

## **Treatment options**

Treatment at NSEHC include physical and non-physical approaches, which are determined on an individual basis. Patients may be offered the opportunity to participate in individual or group sessions depending upon interest, accessibility and availability. Group experiences include Wellness workshops (an experiential process for recovery and well-being), Expressive Arts Program (interactive ways of dealing with long term illness using art and music): Body Mind Awareness Program (a combination of body awareness exercises including yoga and qi gong, together with meditation and based upon the work of Jon Kabat Zinn<sup>2,3</sup>) and Feeling Good Group (facilitated by a psychologist trained in cognitive therapy and based upon the work of David Burns<sup>4</sup>). The patients have developed a self help support group which explores spiritual issues.

Since stress plays such an important role in environmental sensitivities all patients are offered the opportunity to attend Freeze Frame® workshops<sup>5</sup>. Some patients choose to work with this approach and attend a small group on a longer term basis.

Some patients are not ready or able to attend groups and may work with various health professionals on an individual basis. Such therapy includes counseling and counseling together with other modalities such as cranio-sacral therapy, balancing and therapeutic touch.

## **Conclusions**

Even when patients are attending for education on life style changes or sauna therapy, they are supported in the important changes that they are making in their lives. The

milieu created within the Centre either for individual therapy, for physical or nonphysical approaches promotes recovery of health and wellness. Many of the patients when first seen are living from moment to moment and because of their ongoing sensitivity see survival as their main goal. Helping people get in touch with their own values, and resolving some conflicts enables them to go beyond survival and once again explore spiritual issues. Identifying such issues as grief, loss and values conflict and helping the patients to deal with them improves psychological well-being, supports healing and enables the individual to deal with their persisting sensitivities<sup>6</sup>.

### References

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2. Kabat-Zinn, J 1990 "Full Catastrophe Living: using the wisdom of your body and mind to face stress." Delacorte Press.
3. Kaplan KH, Goldenberg DL, Gavin-Nadeau M 1993 "The Impact of a Meditation Based Stress Reduction Program on Fibromyalgia." *General Hospital Psychiatry* 15: 284-289.
4. Burns, David D. 1989 "The Feeling Good Handbook" Penguin Books New York, New York.
5. Childre, Doc 1998 "Freeze Frame®." Planetary Publications, Boulder Creek, California.
6. Coldwell S, Fox RA & Joffres M 1999 "Rehabilitation of the Environmentally Sensitive Patient." Submitted for publication.

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## THE USE OF VORTICES TO PURIFY WATER/AIR

Jan Patrick Baker

NOT AVAILABLE

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## CHRONIC PATHOLOGICAL EFFECTS OF PETROCHEMICALS AND SOLVENTS, IN ANIMALS IN RELATIONSHIP TO MAN.

Name: William A. Croft

### Goals and Objectives:

Observing the chronic lesions in the dairy cow will illustrate the mechanism of petrochemical poisoning and the outcome of those poisonings. Since these solvents are cumulative, aggressive and progressive in their poisoning effects one starts to understand the potential for these poisonous agents.

### Abstract:

Two years prior to the third dairy man moving on the same farm, three families moved 300 dairy cattle on the same farm that had the contaminated gasoline in the drinking water. The dairy cattle and the 3 family members also drank the contaminated water and this allowed for the long term effects to be observed in the dairy cows and family

members. The dairy cattle were exposed to the petrochemicals in the water for 8 months and then moved to various other farms until they all died. Eight dairy cattle were examined by necropsy and detected the pathological lesions within the animals. The chronic lesions detected reinforce the acute or early poisoning effects of the petrochemicals and also demonstrate the chronic solvent, toxic metabolite, and carcinogenic effects of these petrochemical solvents.

**Conclusion of what is to be learned:**

These petrochemical solvents are cumulative, aggressive, progressive and carcinogenic in their poisoning effects. Every measure should be taken to prevent exposure and measures to be taken after exposure.

**References:**

1. Louis J. Casarett, Ph.D. John Doull, M.D. Ph.D. Toxicology, The Basic Science of Poisons, Macmillan Publishing Co., Inc. New York, 1975. Page 721.
2. Waldner, Cheryl, Cattle and the Petroleum Industry: An Introduction for the Veterinarian, 30<sup>th</sup> Annual Convention Proceedings American Association of Bovine Practitioners, Vol. 30: pages 92-103, 1997.
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**IMMUNE DYSFUNCTION IN AN ADOLESCENT, RESULTING FROM  
PRENATAL EXPOSURE TO TOXIC CHEMICALS**

**Deborah Baird, M.D.**

**NOT AVAILABLE**

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## SOIL LIFE AND HEALTH

Malcolm C. Beck

**Objective:** To demonstrate that the quality of life on Earth is determined by the quality of the soil.

### Outline:

All life on earth is sustained by a thin layer of soil

A. Healthy plant life is dependent on healthy top soil

B. All human and animal life is dependent on plant life

Fertile soil is created by decaying organic material and decaying rock

A. Only plants can collect and store the sun's energy

B. Energy the soil life uses to create the fertile soil comes from living or decaying plants

Where are we now?

A. California is gaining 10,000 acres of desert annually

B. Worldwide, 40 square miles are lost to desert every day

C. Organic content of much of our farm land is down to 1/4 of what it should be

D. Crops grown in poor soil have poor food value

E. Quality drinking and irrigation water is deteriorating

Many modern farm methods are not sustainable

A. High analysis fertilizers contain no energy and burn up organic matter faster than it is being replaced

B. Some chemical fertilizers and pesticides destroy the soil life

C. Lack of organic matter and soil life allow water and wind to erode away valuable top soil

D. Organic content of our soils is continually falling

Organic farming methods build and sustain farm land

A. Diversity of decaying organic matter and decaying mineral rock leads to broad spectrum of nutrients for plant life.

B. Adapted plants grown in healthy soils resist insects and disease, making toxic pesticides unnecessary.

C. Scientists have calculated that by building the organic content of the top soil we could easily take all the excess carbon dioxide out of the air

D. Organic/sustainable farms prosper as they build and protect soil fertility, pure water and clean air

**Conclusions:** The quality of our life, the air we breathe, the water we drink and the food we eat depends on the quality of the soil.

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4. Publications, conferences, lectures, and my own organic farm and research.

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**ENVIRONMENTALLY - TRIGGERED VASCULAR DISEASE FROM  
CHEMICAL EXPOSURES**

**Adrienne Buffaloe, M.D., M.Ed., Medical Director  
HC/21 Healthcare for the 21<sup>st</sup> Century-The Environmental Medicine Center  
New York, NY**

**1. Goal and objectives**

- a) To diagnose chemically-induced vascular disease
- b) To recognize the Brain SPECT scan findings consistent with chemically induced cerebral vascular dysfunction
- c) To identify the environmental triggers for vascular disease
- d) Provide treatment for patients

**2. Outline of talk/abstract:**

Vascular involvement is a common feature in environmentally-triggered illness and can present as both large vessel and small vessel disease, Raynaud's-like phenomenon, skin lesions, and vasopastic disease. Foods, inhalants, and chemicals have been shown to cause vasculitis. The current presentation focuses on chemically-induced vascular disease.

Decreased bloodflow to vital organs has been documented causing intermittent as well as chronic symptoms, some life-threatening. Cardiac disturbances include abnormalities in contraction, conduction, excitability, and heart rate. Possible mechanisms are damage to the endothelial barrier, activation of leukocytes and platelets, initiation of plaque formation, stimulation of the inflammatory response, direct damage to cardiac and blood vessel tissue, and kidney-related hypertension.

Disturbances in the peripheral vascular system ultimately lead to extravasation of blood elements outside the vessel, inflammation of the vessel, and reduction and/or occlusion of bloodflow either intermittently or chronically. Ischemia is the result.

The identification of etiological factors is mandatory. Avoidance and treatment can reverse the inflammation and ischemia and halt the progression of the vascular involvement.

**3. Conclusion of what is to be learned:** Chemicals (as well as foods and inhalants) can trigger vascular responses that are intermittent, chronic, and life-threatening. Biopsy demonstrates pathology on the microscopic level. The brain SPECT scan can demonstrate functional pathology. The identification and treatment of the chemical exposures (and

foods) causing vascular dysfunction are the foundation for patient care and can halt the progression of vascular disease.

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**FAILURE OF FEDERAL INSPECTION PROCEDURES FOR BEEF,  
PORK AND POULTRY; BY USDA, HHS (FDA & CDC), EPA & OSHA**

**Lester Friedlander, D.V.M.**

**NOT AVAILABLE**

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**THOUGHTS ON A CANCER EPIDEMIC**

**Ronald Finn MD FRCP, Royal Liverpool University Hospital**

**Liverpool U.K.**

The rising incidence of cancer in an ageing population is now so marked that it could be loosely described as an epidemic. The incidences of cancer increases with age, but this is not the only cause and it is probable that environmental agents are also important. It is also possible that some therapeutic drugs often taken in combination may predispose to cancer. Possible mechanisms would include xeno-oestrogenic effects, direct damage to DNA and inhibition of apoptosis.

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**NEW CONCEPT ON CARDIOVASCULAR DISEASE**

**WILLIAM J. REA, M.D., F.A.C.S., F.A.A.E.M.**

One of the increasing problems in cardiovascular disease is chronic atrial fibrillation. This entity is apparently triggered by the antinomics going into the S.A. mode. Toxic chemical such as phenol have now been shown to temporarily damage this area blocking proper autogenous response and thus atrial fibrillation. Treatment will hold these patients until the cause has been removed and the lesion held.

It has now been shown that there are some etiologies for dissecting aneurysms. Organophosphate pesticides, hydrazines and others can cause dissection. If eliminated early, repair can be carved out. However, late recognition can result in fatality. Newer concepts of the physiology of vasculitis will be presented showing the triggering and propagating issue in the inflammation.

Goals and Objectives:

1. To understand the new principles in cardiovascular disease.
2. To Understand the facts.
3. To use them in the physician's practice.

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**BASICS OF THERMOGRAPHY**

**Dan Beiling, M.D.**

**NOT AVAILABLE**

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**ENVIRONMENTAL FACTORS OF GASTROINTESTINAL  
CARCINOGENESIS**

**Bukin Yuriy.V., Russian Cancer Research Center of Russian Academy of Medical  
Sciences, Kashirskoe shosse 24, Moscow 115478, Russia**

In the united States and Russia, the number of new annual cases of gastrointestinal (GI) cancers reach approximately 180,000 and 100,000, respectively. Analysis of the environmental factors, playing a significant etiological role in GI cancers, is the subject of present overview. In the United States and other Western countries, over 90% of the risk of esophageal squamous cell carcinoma can be attributed to the individual and joint effects of tobacco and alcohol [1]. Consumption of very hot liquids, deficiency of vitamins C, B2, PP, A, B-carotene, zinc, molybdenum, selenium and other trace elements can also play an essential role in esophageal cancer incidence in Iran, China, Siberia and some regions of former USSR. Likewise, increased risk of esophageal cancer is associated with low social and economic status. Risk of esophageal adenocarcinoma also depends on tobacco smoking, alcohol and diet [1].

Main factors, increasing the risk of gastric cancer, besides low social and economic status, include: infection of stomach with *Helicobacter pylori*, influence of nitrites and carcinogenic nitrosamines; heavy metals, asbestos, tobacco smoking, alcohol, high consumption of starch-containing products, salted, pickled and smoked foods, low consumption of fruit and vegetables, and deficiency of some micronutrients (vitamins C and E, B-carotene and iodine {2,3}). Among the risk factors of colorectal cancers there are: a diet high in fat, sucrose and alcohol and low in vegetables and fruit, fiber, antioxidants, folate and calcium [1].

It is obvious that most of the risk factors of GI cancers (summarized in Table 1) are avoidable. Avoiding bad habits, reducing total fat intake, regular consumption of fresh vegetables and fruit, as well as an adequate intake of natural antioxidants, vitamins and minerals can prevent the incidence of GI cancers. As we have shown in case of gastric premalignant lesions [3,4], intake of high doses of B-carotene or vitamin E can block and reverse the carcinogenic process in the stomach (Tables 2 and 3). Some relatively short intervention trials, using antioxidants and microelements for prevention of GI cancers, gave negative results, except for gastric cancer [3]. Taking into account a very long duration of GI carcinogenic process (10-30 years), it may be suggested that a positive effect in groups of patients of high risk of esophageal and colorectal cancer might be achieved only in very long intervention trials.

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## **THE SCIENTIFIC BASIS BEHIND REVERSING END-STAGE METASTATIC CANCER**

### **Part I and Part II**

**Sherry A. Rogers, M.D., FABFP, FABEM, FACA**

Since numerous studies confirm that at least 50-95% of human cancers are caused by diet and environmental chemicals, attempts to reverse and heal damaged or overloaded detoxification pathways have produced rewarding results when applied to the prevention of cancers. More importantly, when all that medicine has to offer has failed, including surgery, chemotherapy, radiation, hormones and bone marrow transplants, collation of scientific evidence from such pillars as Harvard and N.I.H. have been used to reverse and heal cancers in humans even with metastatic end-stage cases.

The success in healing the seemingly impossible hinges on reducing the total load sufficiently so that the body can heal itself. The multiple mechanisms include:

- reinstating the processes of cellular dedifferentiation,
- genetic reprogramming of mutant p53 cancer-promoting gene back to the wild p53 cancer suppressor gene,
- depurating bioaccumulated xenobiotics,
- re-establishing gap junctional (connexin) proteins,
- utilizing enzymes to dissolve the sialoglycoprotein protection about cancer antigen-antibody complexes which results in rendering them vulnerable to the host's immune system attack,
- inhibition of enterohepatic recirculation of carcinogenic hormones,
- repairing xenobiotic detoxication with special nutrients to include minerals, vitamins, amino acids, essential fatty acids, orphan nutrients, lipotropes, and phytochemicals, as well as
- the use of a non-toxic, mineral that provides relief from morphine-resistant cancer pain.

There is no short-cut. The success in healing cancer lies in the comprehension of solid environmental medicine principles, whereby some have even healed metastatic cancers without any medical intervention whatsoever. Case examples will demonstrate these features of the program.

### **References:**

Over 1,000 references plus the details of the program in Rogers SA, *Wellness Against All Odds*, Prestige Publishing, Box 3068, 3500 Brewerton Rd., Syracuse, NY 13220 (phone 315-455-7012 or 1-800-846-6687) and Rogers SA, *Depression Cured At Last!*, *ibid.* Also monthly subscription newsletter and books in progress provide other fully referenced details. New data is constantly emerging and being added.

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# **CHEMICAL SENSITIVITIES CAUSING HEARING & BALANCE PROBLEMS**

**Wallace Rubin, M.D.**

Efficient diagnosis and management of hearing and balance problems that originate in the inner ear requires careful evaluation of the patient's complaints. The history is a vital part of the evaluation of a patient experiencing dizziness. It may be suggestive of a clinical diagnosis, but confirmation by physical examination and neurotologic testing is necessary to document and objectively assess an abnormality that is definitive and diagnostic.

The inner ear is a transducer of mechanical to electrical energy for both hearing and balance functions by means of chemicals present within the perilymph and endolymph. Maintenance of normal hearing and balance therefore is dependent upon the availability of the proper chemicals to perform this transduction task. The inner ear functions as an internal body organ because it is chemically dependent upon many body systems.

Five organ and glandular systems are involved in the regulation of inner ear biochemistry: (1) the adrenal gland, (2) the pituitary gland, (3) the hormonal system, (4) the immune system, and (5) the hypothalamus. Each of these organ systems secretes chemical messengers that interact with each other and with the chemicals that are being transported to the inner ear.

How do we evaluate these systems in relation to inner ear function? Most importantly, how do we apply this information to the treatment of inner ear abnormalities? After instituting treatment, how do we objectively monitor these inner ear problems so as to modify or change the treatment regime?

A patient history and examination will be presented which will illustrate all of the history, diagnostic, and treatment modalities related to evaluating and treating such a patient.

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## **ELECTROSENSITIVITY**

**Klaus-Dietrich Runow, M.D.**

**NOT AVAILABLE**

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## **RECENT DEVELOPMENTS IN FUNCTIONAL IMAGING**

**Theodore Simon, M.D.**

**NOT AVAILABLE**

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## **DETECTION AND DIAGNOSIS OF PETROCHEMICALS, SOLVENTS, IN ANIMALS AND MAN.**

**William A. Croft**

### **Goals and Objectives:**

The Signs and Symptoms Displayed in Man from petrochemical exposure and understanding the mechanism or pathology of petrochemical or Solvent poisoning in Animals will give the means for detection and Diagnosis of petrochemical exposure in man.

### **Outline of talk/abstract:**

#### **Detection and Diagnosis of Petrochemicals and Solvents in Animals and Man.**

A Wisconsin dairy man purchased a farm unaware that gasoline had contaminated the water. The only shallow well on the farm allowed the leaking underground storage to contaminate the drinking water for the dairy cattle and the family members. This allowed for the comparison of the dairy cows and the family members. The signs and symptoms displayed by the dairy cattle matched those of the family members. The pathology detected in the dairy cattle help to establish and reinforce the signs and symptoms observed in the family members. Urinary detection of the metabolites of benzene-phenol, toluene-cresol, and xylene-methyl hippuric acid are detected in the dairy cattle and the family members. The black urine detected in the dairy cows and family indicates a levels of quinol of 40 mg/liter and is 10% of benzene exposure. The dairy cows displayed the same pharmacodynamics and pharmacokinetics as observed in man and represent a useful model to study petrochemical poisoning in man.

### **Conclusion of what is to be learned:**

The signs and symptoms observed can be very important in the detection of petrochemical poisoning or exposure. Urinary metabolites of benzene, toluene and xylenes establish confirmatory evidence of exposure and levels of exposure. Certain tests for benzene in water can not be relied on and may represent a false assay value. The solubility of benzene and toluene in water versus the nonsolubility of xylenes in water will give a different urinary metabolite pattern. Urinary metabolites of the petrochemical solvents are an important tool in the diagnosis of solvent poisoning or exposure.

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## **NEUROPSYCHOLOGICAL EFFECTS OF SOLVENT EXPOSURE**

**NANCY A. DIDRIKSEN, PH.D.**

Organic solvents are one of the major classes of neurotoxic chemicals which adversely affect neuropsychological functioning. Personality and behavioral functioning is adversely affected as well, and may occur as a direct result of exposure, or secondary to the negative life changes resulting from exposure and subsequent illness. Deterioration may be gradual and often insidious.

Organic solvent exposure studies indicate various neuropsychological deficits, including reduced speed of thinking, impaired coordination, decreased concentration, memory, and vocabulary, in addition to psychiatric symptomology including anxiety, panic disorder, and psychosis. Organic solvents are suspected to be causative agents in senile dementia.

The following classifications of solvent-exposed individuals were suggested at the World Health Organization (WHO) meeting on organic solvents in Copenhagen in 1985:

1. Affective Syndrome: neuropsychiatric symptoms reported, no objective findings, considered reversible.
2. Mild Chronic Toxic Encephalopathy: neuropsychiatric symptoms, impairments on objective assessment, uncertain reversibility.
3. Severe Chronic Toxic Encephalopathy: severe neuropsychiatric symptoms, impairments more pronounced on objective assessment, usually irreversible.

Examination of neuropsychological test results of 36 solvent-exposed patients referred for evaluation by physicians at the Environmental Health Center-Dallas indicated approximately 70 percent impairment in the higher-order or executive functions of new problem-solving, abstract-reasoning, concept formation, judgment, mental efficiency, and new learning ability as demonstrated by scores on the Halstead Category Test (average score, 62 errors), and on the Tactual Performance Test (average time, 16.04 minutes). Approximately 12 percent of patients tested scored within normal limits.

Impairment was not as severe on measures of visual tracking and scanning. Approximately 70 percent of patients scored within the normal or low-normal ranges on Trail Making Test Part A. Approximately 55 percent scored within the normal and low-normal ranges on Trail Making Test Part B, which requires greater mental flexibility.

The majority of patients (59 percent) scored in the mildly impaired range on the Halstead-Reitan Neuropsychological Test Battery and 15 percent in the moderately impaired range. Approximately 26 percent had General Neuropsychological Deficit Scale scores within normal limits and none scored in the severely impaired range.

Memory functioning was measured using the Wechsler Memory Scale-Revised. Mean scores on measures of memory functioning were below average for verbal memory, attention and concentration, and delayed memory for verbal and visual information. Greatest impairment was observed on measures of immediate verbal memory. The mean immediate visual memory score was slightly above average.

Three members of a family exposed to gasoline-contaminated well water containing primarily benzene, toluene, and xylene, were examined. The most significant negative effect of exposure appeared to occur in the 63-year-old male family member who demonstrated borderline performances in immediate and delayed verbal and visual memory, and severely impaired executive functioning. Overall, neurocognitive abilities appeared to fall in a moderately impaired range.

The 41-year-old male member of the family was evaluated in 1997 and reevaluated in 1998. He demonstrated significant improvement in general learning ability and range and richness of ideas and words and expression (WAIS-R Vocabulary) from initial

evaluation, in addition to improved executive functioning from the low normal to the perfectly normal range on the Halstead Category Test. Memory functioning (verbal and visual, immediate and delayed) also improved from initial evaluation.

The 36-year-old female member of the family demonstrated generally low normal performances, overall. She appeared least impaired on measures of immediate visual memory, but demonstrated an inability to retrieve the information after a short delay.

All family members indicated higher levels of confusion, fatigue, anger, depression, and tension subsequent to toxic exposure, as measured by the Profile of Mood States. Reevaluation results of one family member indicated diminished levels of tension, depression, anger, fatigue, and confusion compared with initial evaluation results, but remaining greater than preexposure levels.

The neuropsychological effects of solvent exposure may be subtle or severe and appear to depend upon a variety of factors including frequency, intensity, and duration of exposure, age, educational level, and concomitant illnesses and/or neurotoxic exposures. Reevaluation of one member of the family approximately one year after initial evaluation clearly demonstrated improvement with avoidance of the contaminated well water. The possibility of permanent injury may be determined only by subsequent reevaluation. The positive effects of treatment, such as heat depuration therapy, and avoidance of toxic/neurotoxic substances may also be assessed by reevaluation after an appropriate period of time, usually 12 to 18 months.

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2. Hartman, D. (1995). Neuropsychological toxicology. (2nd ed.) New York: Plenum.
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### **A RETROSPECTIVE OUTCOME STUDY OF TWENTY COMPLIANT PATIENTS WITH CHRONIC ILLNESS TREATED WITHOUT DRUG OR SURGICAL THERAPY**

**Stuart Lanson, MD**

A retrospective outcome study was performed on twenty compliant patients with twenty different chronic diseases. These patients had failed to respond to traditional medical or surgical therapy and had been previously treated on average by four physicians. Multiple modalities were used to treat these patients including oxygen therapy, intravenous nutrients, avoidance, nutritional supplements, neutralization, immunotherapy, diet modification, house and workplace environmental changes, and homeopathy. The results

of treatment were collated from patients' charts, and three different questionnaires designed to determine the patients' status were used to evaluate outcomes.

The results were analyzed as follows: a metabolic screening questionnaire reviewing system complaints was filled out at each visit by the patient and the mean was plotted against baseline over a period of six to sixty months. This questionnaire showed a remarkable decline in system scores, irrespective of the diagnosis. There was a sixty-four percent reduction in system scores at 4 months of treatment and eighty-two percent reduction at 6 months.

At each visit, a second questionnaire called a symptom score was also tabulated by the physician and then plotted against baseline. A review of these questionnaires showed a similar reduction in symptoms. Specifically, there was a sixty-four percent reduction in symptoms at three months, a seventy-nine percent at five months, and a ninety-percent at nine months.

A third questionnaire filled out by seventeen patients in the study on one occasion at least three months into treatment evaluated modes of therapy and overall improvement. The average improvement was eighty-eight percent at nine months.

The presentation will detail the format and positive concordance of the three questionnaires and will also show the results.

The conclusions of the outcome study were as follows:

Non-drug, non-surgical therapy was more effective in the treatment of twenty compliant patients with chronic illness than drug or surgical therapy.

Effective non-drug, non-surgical therapy included, in order of efficacy: oxygen therapy, intravenous nutrients, patient education, avoidance of incitants, nutritional supplements, neutralization, immunotherapy, homeopathy, diet modification, and house/workplace environmental changes.

Patients report an average of 64% improvement in symptoms at three months on treatment and a 90% improvement at nine months.

Observer dependent objective data from patients while on treatment has positive concordance with their ultimate clinical course.

Improvement does not progress in a straight line. Some patients worsen in the second month of treatment presumably from mobilization of xenobiotics.

Regardless of the diagnosis, improvement in primary symptom scores and general multi-system scores occur in parallel.

No one modality is effective in all patients.

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## **CHRONIC DISEASE, NEW CONCEPTS**

**WILLIAM J. REA, M.D., F.A.C.S., F.A.A.E.M.**

Many chronic diseases are initially triggered by one group or one substance. However, the propagation may be by the same, similar substances or even unrelated ones as the chronicity appears. At times it is impossible or unimportant to find the initial triggering agent(s). It is much more important to find the daily propagating agents and eliminate or neutralize them. Also attempts at maintaining homeostasis by the use of antioxidants, other nutrient therapy and avoidance regimes is necessary to stabilize and/or at times reverse the chronic disease. Case reports will be used in order to demonstrate this thesis.

### **Goals and Objectives:**

1. To understand propagating and initiating events in chronic disease.
2. Learn to apply the principles in one.

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## **ENVIRONMENTAL POLLUTION: ROLE IN OXIDATIVE STRESS AND PROTECTION BY MELATONIN**

**Russel J. Reiter, Department of Cellular and Structural Biology, The University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78284-7762.**

A variety of environmental pollutants including cigarette smoke, heavy metals, ozone, toxins in crop sprays, etc., are toxic to humans and animals because they generate free radicals in tissues after they enter the body. Free radicals are highly reactive molecules that are often by-products of oxygen (O<sub>2</sub>) which, of course, is required for life. While roughly 95% of the oxygen inhaled is used to produce energy in the form of cellular ATP, some of its spins off as free radicals. These free radicals plunder, mutilate and destroy essential molecules within cells. The destruction left in the wake of free radicals contributes to a variety of diseases such as cancer, emphysema, Alzheimer's disease, etc. To combat the damage (usually referred to as oxidative stress) organisms including man are endowed with a complex system of antioxidants. Antioxidants either directly detoxify or metabolically remove free radicals from cells so their damage is limited. The best known antioxidants are vitamins including E and C and -carotene. Recently, melatonin, an endogenous produced molecule, has been found to be a multifaceted antioxidant. This presentation will include discussions of the following:

- A. Environmental toxins

- B. Generation of free radicals within cells
- C. Molecules that are destroyed by free radicals
- D. Diseases related to molecular damage done by free radicals
- E. Combatting free radical damage with antioxidants
- F. Relative importance of melatonin as an antioxidant

The conclusions to be presented will include a summary of the mechanisms by which antioxidants act, their efficacy in combatting oxidative damage and their role in reducing processes of disease. The following review article may be consulted for additional information: Reiter RJ, Tan DX, Kim SJ, Qi W (1998) Melatonin as a pharmacological agent against oxidative damage to lipids and DNA. Proc. West. Pharmacol. Soc. 41:229-236.

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## **S Y N D R O M E 'X'**

**Jean A Monro**  
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**OUTLINE:** The principal features of syndrome X are hypertension, abnormal glucose tolerance, increased VLDL triglyceride levels, decreased HDL cholesterol levels, obesity and hyperinsulinaemia/insulin insensitivity. These are all cardiovascular risk factors (CAD). Hyperinsulinaemia is the common factor, linked with each of the six risk factors, and reflects decreased insulin sensitivity.

**Hypertension:** Many epidemiological studies have found a positive association between hyperinsulinaemia and hypertension. Hyperinsulinaemia can increase sympathetic neural activity and, as a consequence, blood pressure. Increased insulin levels have been associated with increased circulating catecholamine concentration.

**Dyslipidaemia:** Increased very low-density lipoprotein triglyceride and decreased HDL cholesterol concentrations are features of syndrome X and non-insulin dependent diabetes mellitus (NIDDM). An elevated LDL/HDL ratio has been shown to be predictive of CAD

in diabetic subjects. Increased VLDL triglyceride in NIDDM is primarily due to increase in hepatic synthesis. VLDL triglyceride production rates are correlated with insulin levels. Insulin has a direct stimulatory effect on hepatic VLDL triglyceride synthesis.

A combination of hyperinsulinaemia and decreased insulin sensitivity, particularly at the liver, is required for the sustained increase in circulating VLDL triglyceride levels to develop in syndrome X. Impaired adipose tissue insulin sensitivity in NIDDM and the increase adipose tissue mass in obesity are responsible for the increase on circulating, non-esterified fatty acid levels in these conditions, and this increases the supply of substrate for hepatic VLDL triglyceride synthesis.

Lipoprotein lipase is the principal enzyme involved with catabolism of VLDL triglyceride. There is a deficiency of lipoprotein lipase in NIDDM. Decreased HDL cholesterol levels in NIDDM are due to an increased rate of clearance, primarily mediated by hepatic lipase. Fasting insulin levels correlate with the rate of HDL cholesterol clearance. There is an inverse correlation between circulating HDL cholesterol levels and whole body insulin resistance.

The association with hypertriglyceridaemia with insulin insensitivity: Acute elevation of triglyceride levels can induce insulin insensitivity. Circulating non-esterified fatty acid (NEFA) and triglyceride levels change simultaneously. An increase in circulating NEFA levels will impair insulin sensitivity, and vice versa.

Central obesity: Upper body obesity and lower body fat distribution are features of male and female sexes, respectively. An increased waist to hip ratio is a useful index of upper body obesity. Increased visceral fat stores can be distinguished from those with increased abdominal subcutaneous fat. Only the former have an association with increased plasma triglycerides and blood glucose levels, following an oral glucose load, and are associated with Syndrome X, NIDDM, hypertension, decreased plasma HDL cholesterol and increased plasma triglyceride levels.

Insulin insensitivity is a feature of obesity but peripheral insulin insensitivity is more marked in obese subjects with upper versus lower body fat distribution.

Other cardiovascular risk factors: There is a direct atherogenic role of insulin.

An increase in the circulating levels of plasminogen activator inhibitor 1 (PAI-1) activity is a CAD risk factor.

### **Aetiology of Syndrome X:**

- Dietary composition and intake
- Physical exercise
- Endocrine status

**Treatment:**

- Weight loss
- Medium protein and restricted carbohydrate diet
- Increase in physical activity, exercise.
- Nutraceuticals - vanadium, chromium, vitamin E.
- Endocrine evaluation (hormone therapy - which may include testosterone).

**CONCLUSION:** The giants of nutritional medicine included people who recognised that refining foods resulted in ill-health. The causes of Syndrome 'X' are, in my opinion, two fold and the decline in testosterone with age, and sugar and refined carbohydrates. We need to review our Western society's dietary requirements and habits and revert to wholesome unrefined food.

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**DISTANT DUST AND ECOLOGIC CONSEQUENCES**

**Douglas B. Seba**  
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Atmospheric dust transport of environmental toxins is one of the least studied and understood vectors in the science of the fate and transport of pollutants. This paper will consider both particulates and aerosols in the Caribbean and the Pacific Northwest in meso-scale phenomena. In this content (excluding household dust), particulates are generally soil or sand and aerosols are oceanic spray droplets that can dry to salt particles. In all cases, active absorption and adsorption with organic chemicals is also occurring during transport.

What goes up must come down and dust deposition in both cases appears to be causing ecologic harm far from the source of the dust. For example, while enormous quantities of pesticides may be carried by rivers into oceans, most is bound to sediment and is buried in bottom muds, removed from the food chain. Dust, on the other hand, settles on the ocean surface, is entrained into the surface microlayer, and quickly enters the food chain. Over 90% of pesticides found in ocean fauna is thought to be present from this

mechanism. Even in estuaries adjacent to major metropolitan areas, 85% of the dust is thought to be from distant sources.

With continues global warming, increasing amounts of African soil (currently about 1 billion tons/year) will cross the Atlantic and accumulate in the Caribbean basin and southeastern United States. Increased and prolonged deposition of dust will likely have escalating detrimental effects on Caribbean/Florida coral reefs, lagoonal ecosystems, and human health. Aerosol delivery of nutrients, trace elements and pathogens may stimulate lagoonal and estuarine eutrophication, toxic algal blooms, and disease of seagrasses. Trans-Atlantic aerosols contain pesticides, considered to be effective endocrine blockers, and soil fungal spores. At present, the bacterial and viral content of African aerosols is little known.

In the pacific northwest, the Bitterroot Valley is on the western slope of the continental divide in Montana. Anomalies began to occur in the sex organs of mammalian wildlife, particularly deer in 1994. By 1997, it was clear that this was not individual variation but a trend not seen previously. Both of these events occurred simultaneously with a potato blight which began in the fields of Idaho and Washington.

Concurrently, a great deal of fungicides were applied in an continuing attempt to control the blight. When weather fronts pass across Washington and Idaho, fungicide dust is lifted up orographically to the continental divide where the dust settles in the Bitterroot Valley. At these times, wildlife symptoms, including diarrhea, vomiting, inability to digest food, emaciation and death peak. These symptoms are most severe during October and early November with a secondary peak in late June and early July.

Environmental research like this is very multi-disciplinary project including remote sensing, biology, toxicology, microbiology, public health, agriculture, palynology, chemical oceanography, mineralogy, and both organic and inorganic chemistry. Fortuitously, some of the same individuals are working on both these projects and is a good example of how research of this type can lead to much greater understanding of adverse health effects than just monitoring.

This is contemporary research not yet published but latest data will be presented. For those interested in more information the coordinator for the Caribbean is:

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and for the Bitterroots is:

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Center for Wildlife Rehabilitation  
2858 Pheasant Lane  
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## **THE SCIENTIFIC BASIS BEHIND REVERSING END-STAGE METASTATIC CANCER**

### **Part I and Part II**

**Sherry A. Rogers, M.D., FABFP, FABEM, FACA**

Since numerous studies confirm that at least 50-95% of human cancers are caused by diet and environmental chemicals, attempts to reverse and heal damaged or overloaded detoxification pathways have produced rewarding results when applied to the prevention of cancers. More importantly, when all that medicine has to offer has failed, including surgery, chemotherapy, radiation, hormones and bone marrow transplants, collation of scientific evidence from such pillars as Harvard and N.I.H. have been used to reverse and heal cancers in humans even with metastatic end-stage cases.

The success in healing the seemingly impossible hinges on reducing the total load sufficiently so that the body can heal itself. The multiple mechanisms include

- reinstating the processes of cellular redifferentiation,
- genetic reprogramming of mutant p53 cancer-promoting gene back to the wild p53 cancer suppressor gene,
- depurating bioaccumulated xenobiotics,
- re-establishing gap junctional (connexin) proteins,
- utilizing enzymes to dissolve the sialoglycoprotein protection about cancer antigen-antibody complexes which results in rendering them vulnerable to the host's immune system attack,
- inhibition of enterohepatic recirculation of carcinogenic hormones,
- repairing xenobiotic detoxication with special nutrients to include minerals, vitamins, amino acids, essential fatty acids, orphan nutrients, lipotropes, and phytochemicals, as well as
- the use of a non-toxic, mineral that provides relief from morphine-resistant cancer pain.

There is no short-cut. The success in healing cancer lies in the comprehension of solid environmental medicine principles, whereby some have even healed metastatic cancers without any medical intervention whatsoever. Case examples will demonstrate these features of the program.

## References:

Over 1,000 references plus the details of the program in Rogers SA, *Wellness Against All Odds*, Prestige Publishing, Box 3068, 3500 Brewerton Rd., Syracuse, NY 13220 (phone 315-455-7012 or 1-800-846-6687) and Rogers SA, *Depression Cured At Last!*, ibid. Also monthly subscription newsletter and books in progress provide other fully referenced details. New data is constantly emerging and being added.

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## HEALTHY SOIL, HEALTHY PLANTS, HEALTHY HUMANS

**Malcolm C. Beck**

**Objective:** To demonstrate that the quality of the soil determines the quality of the food we eat, and the quality of food determines our physical and mental well-being.

### Outline:

- Although it is possible to grow plants in poor soil, the plants will have poor value
  - A. Chemical fertilizers and pesticides can produce plants
  - B. "Modern" agriculture is expensive and non-sustainable; it exhausts the soil and grows exhausted plants .
  - C. Exhausted, stressed plants invite insects and disease, which creates needs for toxic pesticides
  - D. Depleted soil was rejuvenated in seven years. Good tilth produced good vegetables.

- Plants grown in organic- and mineral-rich soil have high nutritional value.
  - A. Vitamins and minerals are essential to good health
  - B. Vitamins and minerals should come from the food we eat
  - C. All the food we eat comes directly or indirectly from plant life
- Quality food leads to health in animals and humans
  - A. Even if food is healthy, over-processing can destroy its value
  - B. I cured my own health problems with natural foods
  - C. Improved feed and rangeland led to healthy dairy cows and better milk production
  - D. Experimental pigeons thrived on brown rice alone
  - E. Experimental chicks thrived on whole-grain bread alone
  - F. Pigeons and chicks could not survive on highly processed grains
  - G. Cows were losing their eyesight from grazing on anhydrous ammonia-fertilized grass
  - H. Cattle on organic pasture never went through fence to chemical-fertilized pasture.
  - I. Chemical-fed cows sought out organic pasture.
- Physical and mental health depend on good nutrition.
  - A. Animals on poor diet become irritable and discontented.
  - B. People on poor diet are unhappy and unwell

**Conclusions:** The quality of our food can determine our outlook and success in life

**References:** Howard, Sir. Albert. *The Soil and Health*. Devin-Adair, 1947.

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Watching and studying my five children, my grandchildren, other families and comparing their behavior to their diet. I have had a keen interest in health and its effect on the body and a person's disposition for the past 42 years.

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# **TRACE ELEMENTS IN THE ENVIRONMENT FOR PREVENTION OF DISEASE AND MAINTENANCE OF HEALTH FOR FARM ANIMALS, PART 2.**

## **R. GOODWIN-JONES**

When the trace element (TE) balance in the pastures of a ruminant is correct the ruminant animal will generally remain immune to most of the common diseases and will reproduce efficiently and live a normal lifespan. Symptoms of a TE problem are usually obvious to a trained observer and may be alleviated by the use of one or more of the imperative TE. Ideally this would be carried out by the amendment of the soil medium but it may also be achieved by the use of oral supplements or injections. However denial of TE to soil and pasture renders the whole ecosystem much less efficient in the support of plant and animal life. Symptoms of a TE problem are usually indicated by the colour, texture and abundance of hair or wool, and also by the condition of skin, horn and hoof. Changes in the performance of tendons and ligaments and sometimes muscle become apparent with deformed fetlocks, high tail root, and a low slung head. Common killer diseases such as E coli and pneumonia are symptomatic of a depressed immune system and which may be corrected by the use of TE rather than broad spectrum antibiotics. Autopsy will often reveal necrotic areas of the liver, damaged intestinal surfaces and deteriorated heart muscle. Reproduction is a fundamental part of Life and TE are the key to many of the more common problems. Puberty is delayed, libido is reduced, females cycle irregularly and conception is poor or non existent. Cystic ovaries are common and usually associated with a high tail root. Abortion near to full term, or miscarriage in early pregnancy may occur. Sperm efficiency is reduced by a low count, malformation, and reduced motility. The period of gestation is often variable resulting in premature or overdue birth. Labour is often prolonged with poor uterine contractions and inadequate pelvic ligament relaxation. Uterine prolapse is often a major problem for sheep and dilation of the cervix may be completely absent. Malpresentation of the foetus for normal birth is very common and this will respond to TE correction. The neonatal may die during birth, or very soon afterwards, the quantity of amniotic fluid may be much reduced resulting in a dry birth, or the amniotic membrane can be very thick causing suffocation of the neonatal. The placenta are frequently retained, and the quality of the organ may be considerably below standard. All of the above symptoms may usually be rectified if the TE balance is restored. Finally and interestingly it is possible to adjust the ratio of male female conceived for cattle and sheep by the use of TE.

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## **AGING AND SUSCEPTIBILITY TO OXIDATIVE DAMAGE.**

Russel J. Reiter, Department of Cellular and Structural Biology, The University of Texas Health Science Center, 7703 Floyd Curl Drive, San Antonio, TX 78284-7762.

A primary theory of aging contends that the deteriorating physiology and increased pathology associated with old age is a result of the intracellular accumulation of oxidatively damaged essential molecules. Throughout a lifetime, molecules are continually damaged by what are referred to as active oxygen species or free radicals. These agents damage DNA which can lead to cancer, destroy cell membranes causing the death of cells, and destroy proteins leading to weakening of cellular metabolism and energy production. There is strong evidence that aging and many age-related diseases are a consequence of the accumulated oxidative damage. This presentation will consider free radical damage in the context of aging and the diseases that may be a consequence of the persistent plundering of essential molecules by free radicals. Since many degenerative diseases in the elderly involve the central nervous system, the emphasis will be the major diseases of the brain that involve oxidative stress. The presentation will include the following items:

- A. The free radical theory of aging
- B. Diseases of the elderly which may involve free radicals
  - 1. Cancer
  - 2. Neurodegenerative auditions
    - a. Alzheimer's disease
    - b. Parkinsonism
    - c. Dementias
- C. Slowing the aging process
- D. Use of antioxidants and their role in aging.

Inasmuch as many of the diseases of senescence involve the central nervous system, the participants are urged to consult the following article: Reiter RJ (1998) Melatonin, active oxygen species and neurological damage. Drug News Perspect. 11:291-296.

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## **ALLERGY PATIENTS WITH ADRENAL FATIGUE: LONG TERM TREATMENT RESULTS**

**Steven F. Hotze, M.D.**

It is essential to evaluate allergy patients for the presence of adrenal fatigue because many allergy patients present with an increased incidence of low cortisol levels. Patients who presented for the evaluation and treatment of allergic disorders had routine history and physical Examinations, and skin testing referable to an allergy workup.

Additionally, these patients were evaluated for symptoms related to adrenal fatigue. Blood was drawn for the laboratory assessment of serum cortisol levels.

If indicated, patients were treated with natural slow release cortisol. Each patient's dosage was adjusted based upon relief of symptoms.

The results demonstrate that natural cortisol supplementation, when indicated in patients with allergic disorders, provides significant improvement in the patient's overall health, well-being and energy level.

An overwhelming number of patients who were treated for their allergies in combination with natural cortisone supplementation, when indicated, reported a marked improvement in their original symptoms.

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**American Environmental Health Foundation & Store**

8345 Walnut Hill Lane, Suite 225 (800)428-2343

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The American Environmental Health Foundation is a nonprofit organization established in 1975 to provide research and education into the field of Chemical Sensitivity. AEHF funds this Annual International Symposium and numerous public conferences each year. Funding for both research and education is provided from donations and proceeds from the Foundation Store. Educational materials and information from previous conferences as well as other educational information is available on our website: [www.aehf.com](http://www.aehf.com)

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