

#### **Curriculum Vitae 2015**

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#### **Profession**

Chiropractic Physician, Thought leader in integrative practices; Researcher (published in peer review research with team from The University of Texas Medical School at Houston), Scientist (co-invented a pharmaceutical and a patent for bio-identical hormones), COO of Pharmaceutical company Kenilin, 360-degree hormone and nutrition expert, Certified Nutrition Consultant (with NPI number), Triple Board Certified in Nutrition (Certified Nutrition Specialists, Diplomat American Clinical Board of Nutrition, Applied Clinical Nutritionist), Masters Degree in Nutrition, Medicinal functional food designer, Keynote speaker on motivation, health, anti-aging, hormones, nutrition, and the environment. Author of 24 health books (almost 1 million books sold), Lecturer and relicensing seminar instructor for doctors chiropractic, medical, naturopathic and acupuncturists; patient advocate and medical nutritionist in team medical practice and to private clients; collaborative consultant to Neuroendocrine Consulting (Austin team of Physician Assistant, Nurse Practitioner and Neurologist), Weisman Family Health Practice, Cedar Park, TX, and one week/month to Integrative Medical Center in Tulsa, OK, formulator of nutraceuticals (designed many lines of nutrients such as the first FEM LINE for doctors by Metagenics). Media personality – hosts the Wiseman Family Talk Radio Austin TX 1370 AM, frequent co-host of All Things Medical Tulsa, OK 1140 AM, Certified Yoga teacher with Swami Satchitananda's Integral Yoga Institute, West Coast Swing dancer and designer of gym/yoga workouts.

Active Chiropractic License: California

Inactive License: Oregon In process: Oklahoma

Higher Board Certifications: ACBN, CNS, ACN

# **BOOKS BY BERKSON – chronological order.**

- The Foot Book (Barnes & Nobel/Harper & Row 1977)
- Contributing Author *Body, Mind & Spirit* (Stephen Greene Press 1981)
- Senior Ed. and contributing author to 1st edition of *Alternative Medicine: the definitive guide*, Alternative Med. Press 1993)
- \* Natural Answers for Women's Health Questions (Simon & Schuster 2000/Awakened Medicine 2012)
- \* Hormone Deception: how the environment is deceiving our bodies and how to protect ourselves (McGraw-Hill 2001/Awakened Medicine 2012)
- Healthy Digestion the Natural Way (Wiley & Sons 1998, used by the American Academy of Anti-Aging Medicine to train integrative MDs in their nutritional gastroenterology module.
- \* HRT made Easy (Healthy Press 1999)
- \* Hormones Aren't Gorilla (Healthy Press 2005)
- \* Safe Hormones, Smart Women (Awakened Medicine 2010)
- \* Safe Hormones, Smart Women (revision audio 2013)
- Retraining Your Tongue (Awakened Medicine 2012)
- HeartSpeak: the importance and art of hearing your heart (Awakened Medicine 2013)
- Why is Love so Hard? tips on how to soften love and make it stay (Awakened Medicine 2013)
- Juicy Souls: how we give our spirits away and how to get them back (Awakened Medicine 2013)
- Why is it so hard to keep all our ducks in a row? The wounded warrior (Awakened Medicine 2013)
- My Mother Who Wore Her Purse As a Shoe: dealing with dementia for the family (Awakened Medicine 2013)
- Crossing the Bridge: the feel good-book about dying (Awakened Medicine)
- \* BodyMindHormone Mission book (Awakened Medicine 2013)
- \* Hormone Cliff Notes eBook (launching 2014)
- \* FortyForever eBook (launching 2014)
- \* Live Younger eBook (launching 2014)
- \* Resurrecting Mr. Happy: co authored with surgeon and urologist launching 2014
- \* HRT: Common Mistakes in Taking Bio-identical Hormones (Awakened Medicine 2014 launching)
- \* SEX Nature's Plan to Keep Us Health, first ever hormonal, molecular guide from the atoms on up into the bedroom (launching 2014)
- \* Healthy Digestion II eat your way to intestinal wellness: Serious updated revision with hundreds of new pages and topic from Healthy Digestion the Natural Way. (Launching 2014).
- \* Safe Hormones update and revision of Safe Hormones, Smart Women 2014.

The launching manuscripts are coming out in 2014.

<sup>\*</sup> Related to nutritional endocrinology.

#### Published Researcher:

• (Peer review): Free Radical Biological Medicine 2013 May; 58:46-51. Doi: 10.1016/j.freeradbiomed.2013.01.020. Epub 2013 Jan 29.

Acute effects of hemodialysis on nitrite and nitrate: potential cardiovascular implications in dialysis patients. Bryan, NS, Torregrossa AC, Mian Al, Berkson DL, Westby CM, Moncrief JW.

• (Non-peer review): Med. Hypotheses. 1991 Dec;36(4):356-67.

Osteoarthritis, chiropractic, and nutrition: osteoarthritis considered as a natural part of a three stage subluxation complex: its reversibility: its relevance and treatability by chiropractic and nutritional correlates. Berkson, DL.

# **Employment**

2015 Scientific advisory board member for Enzymedica along with other thought leaders in functional medicine like Dr. Woodson C. Merrell, who is center staff for the Integrative Medical Clinic at Beth Israel Hospital in NY along with M. Momadou PhD, a chemist with his own lab in Houston who travels the world discovering natural plants that he translates into nutraceuticals. This prestigious group works together combining science with the gut and nutrition.

2012-2014 Hormone/nutrition/anti-aging expert working with integrative internist Jerome Block MD approximately one week every 4-6 weeks, and private practice.

2014 – Webinar on Keeping Breasts Safe with cancer-fighting topicals, evidence-based.

2013-2014 Wiseman Family Practice as nutritional endocrine, anti-aging consultant, private practice BerksonHealth, 4 hours CME Minnesota Chiropractic Association, 4 hours of CME Nutridyn Minnesota conference, 16 hr CME for Wisconsin Chiropractic Association; BerksonHealth Talk radio on nutrition 1370 AM Austin, TX, Consultant, nutrition medical team specialist with emphasis on gerontology at Integrative Health Center Tulsa, OK and part-time co-host on All Things Medical with Doc Block, 1170 Tulsa, OK

Regular Radio Shows: Host Radio Show Wiseman Family Practice Health 1370 Talk Radio, Austin, TX, from 2012 – 2014 Co-host many shows with Jerome Block MD "All Things Medical" 1340 Talk Radio, Tulsa, OK, regular guest on Lamar Plaza Pharmacy Radio Show 1370 Talk Radio, Austin, TX.

2013 Creator of 4-hour education course - Hormones and Nutrition in Clinical Practice for American Board of Clinical Nutrition for CME

2013 Webinar Gluten Glitch and Glitches, Webinar on The Power of Food

2013 – Key Note Speaker at Vibrant Health Symposium Austin, TX on Body, Mind & Hormone Links.

2011 Anti-aging program with CesariDirect as team player, author, formulator and writer – 40 Forever, private practice Austin, TX and Cedar Park, TX. Functional food designer. Dialysis Study with University of Texas Medical School, accepted for publication in peer review literature.

2011 Lectures/Courses - CME workshop for Council on Diagnosis of Internal Disorders Symposium July 15-17, Milwaukee, WI; Teleseminar Series for public Vibrant Hormones, Get your Gut in Gear, Cracking the Mid-Life Code and Women Staying Fit. Lectures with Lindsey at Neuroendocrine Center and Weisman Family Medical Center, on hormones, gluten, health, etc.

2003-2011 Private Practice/Consultant and breast cancer advocate. Austin, Texas. Co-inventor of new pharmaceutical for dialysis and diabetic patients, non-healing wounds and soft tissue injuries, patent pending, presented to FDA – Kenilin LLC.

2010 Two-day lecture relicensing for TX CMEs on women's health, hormones and nutrition, for Standard Process Nutrition Inc. Feb.

2001-2011 Participating Scholar at the Center for Bioenvironmental Research at Tulane & Xavier Universities; science driven think tank on estrogens, health and the environment.

2009 Speaker at e.hormone 2009 Tulane University

2009 Hired as community nutritionist/dietician/educator for Barsana Dham Spiritual Community of 75 adults

2009 Co-lecturer relicensing seminars for GYN and family practice doctors on hormone metabolism with

Eldred Taylor MD, Austin, TX and Tulsa, OK

2009-2011 – regular writer for newsletter for American Board of Clinical Nutrition

2004-10 Chief Operating Officer for Kenilin LTD — a new generation of pharmaceuticals and private nutritional consultant to patients and doctors — Raised initial capital, started company, completed pilot study, met with the FDA, patent pending.

2008 Speaker at e.horomone at Center for Bioenvironmental Research and Tulane Med School

20007 Speaker at e.hormone same as above

2006 Speaker at D Day Museum (now The National WWII Museum) opening week on panel with gynecologists and reproductive endocrinologists for Center for Bioenvironmental Research and Tulane Medical School as a 'Community Hormone Salon' for the public. Went of television multiple times to advertise this free inaugural event.

2006 Speaker at School of Public Health and Environmental Health Sciences at University of Minnesota

2006 Key Note Speaker for American Chiropractic Association Council on Nutrition Florida, April

2006 Key Note Speaker for Women's Health at the 92<sup>nd</sup> St., YMCA, NY, NY April 2006

2005 Presenter at ACAM Medical Meeting Orlando Florida on Endocrinology and Nutrition Over the year's presentations at this medical meeting: Presenter at ACAM Medical Meeting on the Science Behind the Chiropractic Vertebral Adjustment; Science Behind Endocrine Disruption

2005 Presenter at Grand Rounds at the University of South Florida College of Public Health, Tampa Florida on hormones and nutrition

2005 Presenter at Dallas American Chiropractic Association Council on Nutrition and Hormones

2005 Presenter at Hormone Therapy and the Next Level Medical Meeting, Montana

2005 Series of Lectures on Nutrition/Hormones at People's Pharmacy, Austin, TX

2005 Series of Lectures on Nutrition at Unity Church, Austin TX

2005 Collaborator on patented HRT (hormones and nutrients), FDA Women's Research Center Tulane/Center for Bioenvironmental Research

2005 Nutritionist - Nutritional Consultant for South Medical Family Practice Clinic, Austin TX

2004 Co-inventor of product for non-healing ulcers in highly compromised patients, Moncrief Dialysis Center

2004 Presenter at Center for Bioenvironmental Research at Tulane and Xavier Universities

2004 Co-author of BIOIDENTIAL HORMON PATENT with Jonathan Wright MD

2004 Co-Presenter at *Omega at the Crossings* in Austin Texas with Erica Elliot MD on living with chronic illness

2003-2004 Adjunct Professor - Public Health and Medical Terminology for Academy of Oriental Medicine, TX

2003-4 Author of Hormones Aren't Gorillas

2003 Keynote speaker on *Hormones and Women's Health* for College Pharmacy Colorado Springs Nov.

2003 Presenter at E- Hormone conference at CBR at Tulane University New Orleans, LA, Oct. 2003.

2001-2005 Consulting Scholar at Center for Bioenvironmental Research at Tulane and Xavier Universities

2003-2003 Environmental Links Committee with Physicians for Social Responsibility On the Environment and Diabetes, non-Hodgkin's Lymphoma and Parkinson's disease.

2003 Independent Nutrition Consultant, formulator for TriMedica Nutrition Inc.

2002-2003 Creator of Weight Management nutritional program and chocolate nutraceutical for Natrol, Inc.

2003 Presenter at the Southwest College of Naturopathic Medicine on Cancer and Nutrition

2002 Co-Key note speaker with Dr. John Lee on Hormones at Sept 28<sup>th</sup> at Phoenix Civic Center, Arizona to 3000 women. *Women, Hormones and Nutrition* 

2003-2004 Editorial Board: Integrative Cancer Journal Ed. Keith Block MD

2002 *Hormone Salon* on Hormones and Endocrine Disruption, Rape Crisis Center in Santa Fe, New Mexico

2002 Co-Presenter of *Managing Muck* with Erica Elliot MD, a symposium on chronic illness and anti-aging in Santa Fe, New Mexico

2001 Speaker for Department of Health and Environmental Science at University of Minneapolis on Hormone Salons, Co-Speaker on Hormone Salon at E.hormone Conference, Tulane University at CBR/medical School

2000-01 Lecturer for Physicians for Social Responsibility on Hormone Disruptors and Reducing Exposure in Everyday Life, New Mexico, Dan Kerlinsky MD

 Consulting scholar and visiting professor at CBR: Center for Bioenvironmental Research at Tulane/Xavier Universities. Specializing in environmental estrogens and hormone disruptors. Visiting professor at School of Public Health and Environmental Ecology at Tulane University

2001 Keynote speaker and visiting scholar at Newcomb Women's College and Research Center on hormones and women's health

1996-2004 Consultant for women with hormonally dependent illnesses and doctors who treat them.

1998 Speaker at Tulane/Xavier Bioenvironmental School of Public Health and Environmental Science and Ecology, Talk on Hormone Disruptors

1997 Keynote speaker at Baltimore Health Convention on Women's Health, Endocrine Disruptors and Natural Alternatives for Menopause

1997-2002 Formulator of WomanPrime for Allergy Research (co-formulated with Drs. Alan Gaby MD and Jonathan Wright MD)

1996 Keynote speaker at New Mexico Women's Association on Hormone Disruptors

1995-8 Research and writing of digestive and hormone disruptor books.

1994 Lecturer to New Mexican Women's Forum on Women's health and weight loss.

1993 Senior Editor and contributor "Alternative Medicine: the definitive guide Ed.(Future Medicine Press, 1994)

1992 Lived with Aboriginals in Australia studying indigenous cultures and dreamtime. Lived in Cairns Australia and taught holistic health, chiropractic understanding for lay persons and nutrition.

1991 Published paper in Dec. issue of "Medical Hypothesis" on Osteoarthritis and Nutrition.

1991 Co-Designed *Gastroline* Product Line with Leo Galland MD for Allergy Research. Designed *Menoplus* for Omma Nutrition. Post-Graduate Lecturer on Nutrition for Women for Western States Chiropractic

1980-95 private practice in multi-disciplinary practice; most of career have teamed with medical groups.

Founder/Director of Berkson Multidisciplinary Clinic, Chiropractic and Nutrition in clinic w/ cardiologist, internist, herbalist, etc. Co-President of Health in Motion Productions. Designer and Producer of Multiple Health AudioTapes. Designer of Women's Line of Vitamins: FemLine, for Metagenics, national lecture tour 1987-91

1980-1985 Private Practice Chiropractic and Nutrition at the Center for Orthomolecular Medicine, Palo Alto, CA, founded/directed by Carl Ebnother MD (cardiologist) specializing in nutrition, women's health, digestive health, evaluating Heidelberg gastric analyses, weekly lectures on outreach of chiropractic care, nutrition and integrative health.

1985-6 Keynote speaker of the year for Diet Centers of California

1983-1988 Hosted Dr. Berkson's Nutrition Show on KEST in Bay Area, Hired as keynote speaker and *comedienne* for local women's functions

1984-1988 Speaker for relicensing seminars for Ph.D.s in public health and nursing around the country sponsored by Cortext Company.

1984-85 Free-lance articles on health and nutrition for San Francisco Chronicle, the Wednesday food section.

1978-1985 Adjunct Professor of Nutrition at Western States Chiropractic College, visiting professor at the National College of Naturopathy, Bastyr College of Naturopathy, and visiting professor at University of Minnesota School of Medicine and School of Public Health at Tulane University

1975-79 Taught yoga, spine and nutrition interrelationship classes every Sunday morning for the public.

1970's Speaker at Asilomar Conference Grounds on integrative health multiple times.

1981-89 Keynote speaker for up to 60 various relicensing seminars for M.D.s, dentists, acupuncturists, naturopaths, etc. co-sponsored by universities and medical societies along with various health

companies such as Emerson Vitamins in NYC, Metagenics, Doctor's Data, etc.

1975 – Grant in the Vermont High Schools to teach principles of health. Outreach in Vermont teaching nutrition and exercise at community centers and churches.

1970's Yoga Teacher with Swami Satchitananda's Integral Yoga Institute learning aruvedic medicine, yogic principles and service to the community through out-reach in prisons and community centers.

Early 1970's lived with Hopi Indians in Arizona teaching nutrition and learning indigenous cultures.

1970 Certified as Shiatsu Therapist by Masters Tokujiro and Toru Namikoshi Sensei

Early 1970's lived with the Nearings and Elliot Coleman studying organic gardening, homesteading and taught nutrition to the thousands of public that came to study at Forest Farms.

#### **Publications**

2013 Free Radical Biological Medicine – Original Dialysis Research (emphasis on nutritional molecule NO)

2009 Contributing Author many times for Newsletter for American Board of Clinical Nutrition 2002 Freelance health writer for Santa Fe New Mexican on hormones, HRT and anti-aging 1991 "Osteoarthritis, Chiropractic and Nutrition" Article, for Medical Hypothesis Medical Journal

1990 Silver Medal Award in Poetry

1989 Five scientific documenting articles for FemLine Products

1989 Article for Minnesota Board of Chiropractic to present in court on state case of breadth of scope of practice for Minn. chiropractors

1987-8 Articles in San Francisco Chronicle in the Food Section

1988 Article on Fat Facts for Dallas Herald Tribune

Interview Article in Complementary Medicine, on Chiropractic and Sports Medicine, Co-interviewed with Don Davis DC

1982 Three-part interview series on digestion in "Let's Live", written by Maureen Salomon, President of National Health Federation

1980's Health Writer, Full page, monthly in San Francisco Chronicle in Health & Food Section

## **Teaching Positions**

Adjunct Professor at the Academy of Oriental Medicine at Austin, TX in medical terminology Professor of Nutrition at Western States Chiropractic College, Visiting Professor at National College of Naturopathy, Bastyr University of Naturopathy, Visiting professor at University of Minnesota School of Medicine multiple times speaking solo as well as debating department heads on gynecologic health, visiting professor at School of Public Health and Environmental Sciences at Tulane University on hormone disruption and anti-aging, visiting professor at Department of Environmental Sciences and School of Public Health at University of Minnesota, Palmer Chiropractic School, National Chiropractic School, and Palmer West Chiropractic School.

**Administrative and Monetary Positions:** Running the Berkson Clinic and Kenilin companies.

**Honors and Special Recognition** 

Pick of the Year Environmental Medicine Group 2004

Cum Laude Graduate, University of Michigan

Who's Who in California 1986

Who's Who in American Authors 1980

Key Note Speaker for Diet Centers in CA 1985

Best Selling book The Foot Book 1981

Who's Who in American College Students 1978

Picked for One Student Per Year with Dr. J. Wright for Rotation in Integrative Medicine Distinguished Chiropractic Service Award, Northern CA, 1986 "Chiropractor of the Year" in California

Distinguished Chiropractic Service Award, CA, 1983

Board Member Medical Nutrition Magazine 1988

Board Member National Nutritional Research Foundation 1895

WHOS WHO IN POETS 1994

Silver Medal Award in Poetry 1990

WINNER OF SOUTHWEST WRITERS ANNUAL 12TH WORKSHOP

### Of Note

First chiropractor to work in the first multi-disciplinary clinic in the US (Center for Orthomolecular Medicine run by the cardiologist Dr. Carl Ebnother, Palo Alto, CA) First chiropractor to work with a medical doctor in the US

First chiropractor to hire MDs in US – this prompted getting sued by the Attorney General's Office of California and arrested, two-year battle, worked with the California Chiropractic Association to fight and win battle; all charges dropped and the man who put hand-cuffs on was found to be guilty of harassment and fired. After this chiropractors could now work with and hire medical doctors. The trauma of this battle and Berkson's life being threatened by Board of Medical Quality Assurance had much to do with career path.

First developer/formulator of first menopause nutraceutical product and line for Metagenics. One of the first nutritional talk show hosts in SF, CA on KEST radio.

Author of one of the first three breakthrough books on endocrine disrupting chemicals (*Hormone Deception* – which has been used as a text book in the environmental health sciences program at the University of Minnesota.

First author and advocate of detoxification as a way to deal with endocrine disrupting pollution (*Hormone Deception*)

Author of one of the first books on the science behind bio-identical hormones (*Safe Hormones, Smart Women*) and the first hormone book on audio.

First chiropractors to teach what a subluxation is and the science behind it to the American College of Holistic Physicians (medical group).

One of the early doctors to work with Heidelberg Gastric Analysis Units in US and specialize in the gut

A collaborator in one of the first early books on integrative medicine and the first to coin the term Body, Mind & Spirit (edited by Stephen Greene press).

A senior editor and collaborator in the first edition of Alternative Medicine: the definitive guide.

Collaborator on World Health Organization paper on the first multi-factorial etiologies of Diabetes

## **Product Development**

Kenilin Pharmaceutical – co-inventor for non-healing lesion treatment patent and research with dialysis and diabetic patients with Dr. Jack Moncrief who co-invented the CAPD home dialysis unit.

Next" generation of bio-identical hormones with Jonathan Wright MD – collaborator bioidentical hormone patent

Creator of the Decadent Diet Weight & Mood Management with

Natrol & Annasa 2002-2003

Co-creator with Leo Galland — GastroLine for Allergy Research/Ecological Formulas Co-creator with Jonathan Wright MD and Alan Gaby — WomanPrime for Allergy Research/Ecological Formulas

Creator of female line with Metagenics — Fem Line (first natural line for doctor's using nutrients and herbs to treat a variety of female problems)

#### Media

Full time Host Wiseman Family Practice Health Show formerly Berkson Health Talk Austin, TX

Regular Guest on Your Smile Matters San Antonio, TX

Frequent co-host on All Things Medical, Tulsa, OK

Frequent guest on People's Pharmacy Nutrition Radio Show 2005-2013 Austin

- Lots of Media interviews for various books
- Hosted weekly Dr. Berkson Nutrition Radio Show San Francisco 1982-1987
- Free Lance Health writer for many magazines and newspapers nationally
- Featured guest on hundreds of radio and television shows nationally such as *People's Pharmacy* on NPR Oct. 2003, etc. (Several examples-- Good Morning San Francisco (where I was a co-guest with Dr. Doris Rapp on Food Allergies and Hyperactivity in Children) and in New Orleans nightly news

Free Lance Column in SF, Chronicle, whole page in Health/Food Section once a month in 1980's

### **Audio and Podcasts**

Multiple radio shows from last several years often archived on radio and pertinent web sites Webinars - 2013-2014 Hosted by Berkson

Keeping Breasts Safe

The Power of Food

Gluten Glitz and Glitches

Get Your gut in Gear Webinar with Dr. Rita Marie Loscalzo

Vibrant Hormones Webinar with Dr. Rita Marie Loscalzo

Nutritional Applications for Women's Health (Metagenics and Health in Motion)

Nutritional Biochemistry for Gastrointestinal Disorders, Allergy Research

Health In Motion Productions: Nutrition and Women, Nutrition and Musculoskeletal Syndromes, Nutrition Revolution Series Tapes, The Berkson Relaxation Motivation Tapes. Health in Motion Productions

A line of 12 series of nutrition tapes for doctors: Creative Audio

#### Education

Participating Scholar at CBR at Tulane and Xavier Universities Board Certifications CNS, DACBN, CAN in nutrition

Numerous Update Seminars and courses such as Wright/ Gaby Nutritional Therapy in Medical Practice and Menopause, Andropause in Medicine Salt Lake City, and BHRT with A4M.

Western States Chiropractic College Portland, OR.

Rotation in Integrative Medicine with Dr. J. Wright 1977

Goddard College, VT (Masters Nutrition)

University of Michigan, Dual BAs (Psychobiology, Communication & Film)

Northwestern University, IL. (Communication Program)

### **Scientific Publications**

Free Radic Biol Med. 2013 May;58:46-51. doi: 10.1016/j.freeradbiomed.2013.01.020. Epub 2013 Jan 29.

Acute effects of hemodialysis on nitrite and nitrate: potential cardiovascular implications in dialysis patients.

Bryan NS<sup>1</sup>, Torregrossa AC, Mian AI, Berkson DL, Westby CM, Moncrief JW.

Author information

Abstract

Cardiovascular mortality in dialysis patients remains a serious problem. It is 10 to 20 times higher than in the general population. No molecular mechanism has been proven to explain this increased mortality, although nitric oxide (NO) has been implicated. The objective of our study was to determine the extent of the removal of the NO congeners nitrite and nitrate from plasma and saliva by hemodialysis, as this might disrupt physiological NO bioactivity and help explain the health disparity in dialysis patients. Blood and saliva were collected at baseline from patients on dialysis and blood was collected as it exited the dialysis unit. Blood and saliva were again collected after 4-5h of dialysis. In the 27 patients on dialysis, baseline plasma nitrite and nitrate by HPLC were 0.21±0.03 and 67.25±14.68 µM, respectively. Blood immediately upon exit from the dialysis unit had 57% less nitrite (0.09±0.03 µM; P=0.0008) and 84% less nitrate (11.04 µM; P=0.0003). After 4-5h of dialysis, new steady-state plasma levels of nitrite and nitrate were significantly lower than baseline, 0.09±0.01 µM (P=0.0002) and 16.72±2.27 µM (P=0.001), respectively. Dialysis also resulted in a significant reduction in salivary nitrite (232.58 $\pm$ 75.65 to 25.77 $\pm$ 10.88  $\mu$ M; P=0.01) and nitrate (500.36 $\pm$ 154.89 to 95.08±24.64 µM; P=0.01). Chronic and persistent depletion of plasma and salivary nitrite and nitrate probably reduces NO bioavailability and may explain in part the increased cardiovascular mortality in the dialysis patient.

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