

Silicon Valley Health Institute

host of the Smart Life Forum

NEXT MEETING: Thursday, March 21, 2013, at 7pm

James LaValle, R.Ph, CCN, NMD

“Metabolic Wellness: Cracking Your Metabolic Code”

Elize St. Charles, PhD, CNC, BBP, MBA

“About Electromagnetic Fields”

Note: Main Presentation precedes Short Talk

Meet James LaValle, R.Ph, CCN, NMD



Jim LaValle, R.Ph., C.C.N., N.D., has 18+ years of clinical practice experience in the field of natural therapeutics and functional medicine. He received his license in pharmacology from the University of Cincinnati College of Pharmacy, certification as a clinical nutritionist from the International and American Associations of Clinical Nutritionists and his doctor of naturopathic medicine from the Central States College of Health Sciences. He is currently in clinical practice at the Lavalle Metabolic Institute.

He is a member on the Scientific Advisory Board for the Dietary Supplement Education Alliance; is an adjunct associate professor in the College of Pharmacy at the University of Cincinnati; and serves as preceptor in the Department of Family medicine at the University of Cincinnati College of Medicine. He is the author of 14 books, the latest being "Cracking The Metabolic Code" and is an adjunct professor in the College of Pharmacy, University of Cincinnati.

(continued on next page)

Presentation Location:

Cubberley Community Ctr.
Room H1
4000 Middlefield Rd.
Palo Alto, California
Driving directions on our website,
www.SVHI.com

For those who cannot attend we have live streaming and video archiving at
<http://bit.ly/ZpId3o>

In This Issue

Meet James La Valle, R.Ph, CCN, NMDpage 1

Announcements.....page 2

Main Presentation Overview:
“Metabolism” by Susan Downs, MD, MPH, SM, MS, pages 3–6

Short Presentation:
Elize St Charles, PhD, “About EMF”page 7

Membership Formpage 8

Foundation for Mind Being Research (www.FMBR.org)
March 22 (the fourth Friday) Meeting: Dawn Clark, will be our speaker.
Her topic will be: “Activate your Potential”. Her websites: Dawnclark.net

Announcements:

James Lavalle, our March speaker, will also present at the Commonwealth Club at 6 PM on March 20 th.
595 Market Street, 2nd Floor, San Francisco, CA 94105
Tel (415) 597-6700 Fax (415) 597-6729 - See more at:
<http://www.commonwealthclub.org/>

Welcome to New board members:

:
Douglas Husbands, DC, CCN
is well known and appreciated by us all. He has been helping us resolve chronic illness and improve our health for years. He is a Doctor of Chiropractic, , board certified as a Certified Clinical Nutritionist with the International and American Associations of Clinical Nutritionist and is a certified Health Care Practitioner with the American Board of anti-Aging Practitioners. He is also close to completing his certification with the Institute for Functional Medicine

Robert Menkemeller, R.N.C.

Robert became aware of his passion for health while living overseas. In 1989, he began to focus on nutrition and decided to become a Registered Nutrition Consultant. Robert feels fortunate to have been trained and mentored by an Orthomolecular Nutritionist and an M.I.T Trained Chemist. Over the last 20 years as a Nutritionist, he has focused on reaching a wider population to improve and understand their health rather than individual consulting. He started his first company in 1995 teaching individuals to become nutritionists through a California Private and Postsecondary approved home study course. During that time, the company built two online nutritional software analyses to help nutritionists better assess their client's needs. He has also devoted studies to the mind and believes strongly in its importance in health and healing. His second passion is online multimedia learning and he is now in the process of starting his second company creating online health education and an online interactive healthcare system.

Volunteer Opportunity: Prepare monthly SVHI newsletter layout. Content will be emailed to you from the program director. Create doc & pdf copies. Template provided. Work during end of month for first week of month distribution. Tech support provided. Please contact [Susan Downs](#) or [Laura Dominguez-Yon](#)

Upcoming Speakers:

April 18, 2013:

Burton Goldberg:

"What's being done to our food and what can we do about it"

May 16, 2013:

Tom Levy MD

"Health Ailments"

Future Speakers:

Mahtab Jafari "Truth about antiaging medicine";

Jerry Kartzinel, MD "Autism ";

Ari Vojdani "Immunity Issues";

About Smart Life Forum

Smart Life Forum, Inc. is a 501(c)(3) California nonprofit corporation whose primary mission is to provide credible health education to the public with an emphasis on optimal wellness, anti-aging medicine, and longevity.

Annual memberships in Smart Life Forum, Inc. and charitable donations are tax deductible to the extent allowed by law. For information on how to join or make a donation, please visit our website: www.SVHI.com. For questions, please contact Susan Downs at susanrdowns@hotmail.com

Main Presentation Panelist Topic:

Metabolism

by
Susan Downs, MD, MPH, SM, MS

Metabolism is the term used for all the physical and chemical reactions in the body. It includes converting the foods we eat and transforming them to building blocks for our bodies. It is a balance of the anabolic (tissue building process – converting small molecules into larger molecules) and catabolic processes (processes which breakdown substances in the body i.e. converting larger molecules into smaller molecules).

The metabolic code is a system designed to understand influences on person's individual chemistry, and therefore all these processes. Anabolic hormones include insulin, IGF 1 (insulin-like growth factors ¹), testosterone, estrogen, and growth hormone. Catabolic hormones include glucagon, cortisol, catecholamines (epinephrine and norepinephrine). Our bodies will regulate these processes in order to sustain life. Sometimes this compensation could be at the expense of other processes in the body. We may not have symptoms during this period, but over the long term, such compensation can cause damage to our bodies and result in chronic health conditions.

Glucose Regulation

One of the essential factors influencing the body's metabolism is glucose levels and regulation. Insulin is produced to insure that glucose levels do not go too high. The counter regulatory hormones (glucagon, cortisol, and the catecholamines) are life-sustaining hormones that insure the cells in the body have adequate glucose levels to sustain life. Throughout the day, our bodies are constantly switching back and forth between these hormones to ensure constant levels. However, excessive activation of either extreme can cause an imbalance and ultimately, disease.

(continued on next page)

Smart Life Forum

Board of Directors

Dave Asprey - Chairman
Effie Mae Buckley - Secretary
Laurel Corcoran - CFO, Treasurer
Susan Downs - President
Bill Grant - Publicity
Larry Wiessenborn - Sound
Doug Husbands, DC, CCN
Robert Menkemeller, RNC

Founder

Kathryn Grosz

Advisory Board

Alan P. Brauer, MD
Bernd Friedlander, DC
Tim Gallagher, DDS
Bill Grant, PhD
Phillip Lee Miller, MD

Meeting Moderators

Dave Asprey; Alexis Bright; Stan Durst; Tom Gurske; Douglas Husbands, DC.; Elise St Charle, PhD

Volunteers

Rob Baum, Assistant Editor
Jake Brzakovic, Fitness Advice
Laurel Corcoran,
Records/Printing/Mailing
Laura Dominguez-Yon, Newsletter
Layout
Steve Fowkes, Technical Advisor
Susan Downs, Newsletter Editor and
Program Director
Rob Larson, Equipment Mgr.
Sharon Luehs, Associate Editor
Don Southard, Reception
Larry Wiessenborn, Audio Eng.
Pamela Zuzak, Video Sales

(MAIN PRESENTATION, continued)

We are all familiar with high insulin levels, which lead to insulin resistance and our body not being able to use insulin efficiently (decreased insulin sensitivity). On the other side of that equation, low insulin levels resulting in high levels of the counter regulatory hormones, likewise create risk factors for future diseases. It does this by up regulating the GSK3 (glycogen synthase kinase 3 pathway) which over the long term has been connected with increased microglia activation in the brain, inflammation, nerve death, tumor growth, loss in long-term potentiation of memory and beta amyloid 42 and tau phosphorylation (both risk markers for Alzheimer's Disease). Insulin resistance, and low insulin levels both stimulate this pathway. Insulin and lithium have been found to decrease this pathway. ^{1,2}

It has now been confirmed that inefficient insulin signaling within the cells not only leads to diabetes it is also involved in neurodegenerative diseases such as Alzheimer's disease. Some physicians have postulated that a high protein diet can potentially have the same effect as a high glucose diet due to the same response of the counter regulatory hormones. While a high protein diet has been shown to stabilize glucose levels in the short term, this could be a problem in Type 2 diabetics that have over production of glucagon when blood sugar levels drop. ²

Thyroid Metabolism

Thyroid hormone increases the utilization of carbohydrates and fat from food and the rate of protein synthesis. It stimulates the appetite and the movement of food through the digestive tract. Thyroid hormones help regulate glucose levels, increase the uptake of oxygen into the cells and increase the number of mitochondria within the cells. Aging, poor nutrition, stress and exposure to environmental toxins can all damage the thyroid gland and undermine its metabolic functions by decreasing thyroid hormone production or activity.

Low thyroid activity inhibits adequate hydrochloric acid and digestive enzymes. This can result in poor digestion, increased gut permeability and the development of food sensitivities and autoimmune diseases. Proper thyroid functioning depends on trace elements such as iodine, chromium, selenium, zinc, and the amino acid tyrosine. Substances that can interfere with thyroid functioning include environmental toxins, fluoride, chloride, bromides (which compete with iodine) the heavy metals mercury and lead. Cortisol also interferes with thyroid functioning as cortisol production requires tyrosine making it unavailable to produce thyroid hormones.

Important tests in assessing thyroid functioning include

TSH (thyroid stimulating hormone): Should be below 3. Some endocrinologists believe it should be under 2.

Thyroid binding globulins which bind thyroid hormones making them unavailable. (Estrogen can increase these whereas testosterone can decrease these.)

(continued on next page)

(MAIN PRESENTATION, continued)

Free T 3 and Free T4

Cortisol, stress, low iron and low selenium can interfere with the conversion from T4 to T3.) It is important to measure the conversion of free T 4 to free T3 as there are many factors that can interfere with this conversion such as those just mentioned. Antibodies and reverse T3 are also important.

Reverse T 3 (rT3)

This inactive form blocks the receptors from using the available free T 3. Stress, caloric restriction, low and high cortisol, free radical load, toxic metal exposure all can increase the percentage of rT3 produced.

Adrenal Gland Functioning

Thyroid metabolism cannot be balanced until the adrenals are balanced.

When stressed, the adrenal glands produce catecholamines which result in the fight or flight autonomic nervous response.

Prolonged stress has many adverse health effects including an increase in glucose and increased conversion of proteins to glucose.

This can lead to increased food cravings especially for high fat, high sugar, high carbohydrate foods, and the stimulation of extra insulin release.

Excess cortisol can:

- retard regeneration of connective tissue resulting in a slow wound healing.
- increase tumor necrosis factor (TNF a) and interleukin 6 (IL 6) which make the body's immune response become hyperactive leading to autoimmune diseases
- decrease production of the thyroid glands (as it competes for tyrosine)
- increase cholesterol and triglycerides,
- increase blood pressure, loss of sex drive, sleep disturbances, and the destruction of neurological and brain tissue

Environmental toxins and a disturbed bowel terrain adversely affect adrenal function.

Adrenal function can be measured through salivary tests or through blood pressure readings. Blood pressure can be taken while lying down and then again when standing. If you feel dizzy or the blood pressure drops upon standing, adrenal malfunction is suspected.

(continued on next page)

Join Us! First time Visitors may attend free of charge.

Smart Life Forum, Inc. (SLF) is a California qualified 501(C)(3) nonprofit corporation organized under state law for educational and scientific purposes as a public benefit corporation. Please make your check payable to "Smart Life Forum, Inc." Please send your email address as well.

Donations welcome: send to,
Laurel Corcoran, Treasurer,
314 Grant Ave, Palo Alto, 94306
See website for other payment options.

Annual Membership \$60 (per household).
Benefit: Access to a community of experienced scientists and physicians who share information and similar interests.

(MAIN PRESENTATION, continued)

Effects of Free Radicals and Inflammation

Free radicals are molecules with an unpaired electron that can cause damage by taking an electron from neighboring cells. This creates a chain of events through oxidation reactions known as oxidative stress. This can damage cell walls so the cells cannot take in nutrients or communicate with other cells. This can damage enzymes and cause proteins to cross-link. These damaged cells lose their ability to communicate and to generate energy that can result in damaged DNA and cell death. Free radicals can disrupt the endocrine system, alter immune function and impair the nervous and digestive system. The most common diseases associated with increased oxidative stress are what we typically call the diseases of aging like type 2 diabetes, heart disease and cancer, but damage and the downward spiral in health that results from it is also associated with neurological dysfunctions such as Alzheimer's disease, Parkinson Disease, as well as arthritis, disrupted immune function, macular degeneration, and obesity.

Sources of free radical damage include the electron transport chain in the mitochondria, cytokines and other substances produced by abdominal fat cells. Stress, high homocysteine levels, pollution, excess exercise, sunlight, cigarette smoke, automobile exhaust, fertilizers and pesticides also contribute to free radical production. In the body's attempt to detoxify these compounds via the P450 enzyme system in cells, free radicals are generated.

Oxidized and rancid fats in food are another source of free radicals. Exposure to heat and oxygen can cause unsaturated fats to oxidize. The worst offenders are deep fried foods, and cooking high fat foods in high heat should be limited.

Free radicals and inflammation are interconnected. Each leads to the production of the other.

In summary the body's metabolic process is an intricate symphony interconnected at many levels. Although this discussion only discusses a fraction of this symphony, it is clear that pharmaceutical interventions aimed at a specific pathway can disrupt the system at many levels, lifestyle and appropriate nutritional measures can dramatically improve and restore metabolic balance, leading to an improved quality of life and disease prevention. In fact, life style changes affect our genetic expression (epigenetics) Dr. LaValle is an expert in these areas and will discuss this further

References.

1. Jope RS (Apr-May 2007). Glycogen synthase kinase-3 (GSK3): inflammation diseases, and therapeutics." *Neurochem Res* 32 (4-5): 577-9.
2. Lectures from Diana Schwarzbein, A4m conference December 2012, Las Vegas
3. James Lavalle. Cracking the Metabolic Code, Basic Health Publications 2004

Videos for Sale

Smart Life Forum offers an extensive video library of most of our meetings, available on DVD. You may purchase a DVD at the meeting, or request a DVD via email. Please see our website for meeting information and how to order.



Meet Elize St. Charles, PhD, CNC, BBP, MBA,



Elize St. Charles, PhD, CNC, BBP, MBA, has been involved in alternative and complementary healing modalities for more than 30 years. With her extensive understanding of the natural healing arts, Elize has provided health care to people in all walks of life including star athletes, executives, mothers, babies, the brain injured and the chronically ill. Her extensive academic and professional development and problem-solving skills, combined with her success in improving her own health, makes her a talented healer. She received her PhD from the Clayton College of Natural Health and Healing and her MBA from McGill University.

Short Presentation:

About EMF (electromagnetic Fields) by Elize St. Charles, PhD, CNC, BBP, MBA,

A noted metabolic cardiologist, Stephen Sinatra noticed his son's health deteriorating. He determined that the cause of his son's illness was EMF exposure. EMF is yet another source of environmental influences that adversely affects our health. Although the studies are controversial, some researchers suspect a connection between EMF and tumors and chronic neurodegenerative diseases. Prevention can include keeping the cell phone away from our bodies, not using cell phones in cars, trains or airplanes, earthing and filters for houses. Dr St. Charles will discuss detection of EMF, preventive measures and risk its connection with various diseases.

Join Us! First time Visitors may attend free of charge.

Smart Life Forum, Inc. (SLF) is a California qualified 501(C)(3) nonprofit corporation organized under state law for educational and scientific purposes as a public benefit corporation. Please make your check payable to "Smart Life Forum, Inc." Please send your email address as well.

Donations welcome: send to,
Laurel Corcoran, Treasurer,
314 Grant Ave, Palo Alto, 94306
See website for other payment options.

Annual Membership \$60 (per household).
Benefit: Access to a community of experienced scientists and physicians who share information and similar interests.

Renew your membership today!

Complete this form & mail back with payment:

\$60/year full membership (household); \$30/year associate membership (newsletter downloads)

Yes, you can renew and pay in person at a meeting.

Donations welcomed.

NAME: _____

ADDRESS: _____

CITY: _____ ZIP _____

PHONE: _____ PHONE 2: _____

EMAIL: _____

Amount enclosed: \$_____, for (check applicable boxes):

_____ Full Membership (\$60) _____ Associate Membership (\$30)

_____ Donation (\$_____)

Please make your check payable to "Smart Life Forum, Inc." and send to:

**Laurel Corcoran, Treasurer,
314 Grant Avenue, Palo Alto, 94306**