Silicon Valley Health Institute

Host of the Smart Life Forum

Next Meeting: Thursday, October 19, 2017

Main Presentation: Steve Blake, ScD

"Brain and Body Nutrients in Popular Diets"

Second Presentation: William Grant, PhD

"Vitamin D"



Meet Steve Blake Page 3



Meet William Grant Page 5

Smart Life Forum Presentation Location

Cubberley Community Center
Room H1
4000 Middlefield Road
Palo Alto, California
Directions on our website:

www.SVHI.com

Newsletter Table of Contents

- Page 2 Announcements/Upcoming Events
- Page 3 Meet Steve Blake, ScD!
- Page 4 Main Presentation: "Brain and Body Nutrients in Popular Diets"
- Page 10 Meet William Grant, PhD!
- Page 11 Second Presentation: "Vitamin D"
- Page 12 Become a member of the SLF Community!

Announcements & Upcoming Events

Upcoming Speakers:

NOVEMBER 2017
Raymond Francis

JANUARY 2018 Christiane Northrup, MD

<u>Upcoming Foundation for Mind Being</u> <u>Research Meeting (FMBR)</u>

Friday, October 27, 2017 @ 7:30pm

Jeanne Love & Regina Ochoa
Channeling the Challenger Astronauts

Unity Community Church Y.E.S. Hall 3391 Middlefield Rd, Palo Alto, CA

Please visit www.FMBR.org for more info.

A Board Member position and a Membership

Chair postion are available. Interested persons can contact any board member or email Susan at:
susanrdowns@hotmail.com.

Thank you.

SLF MembersBOARD OF DIRECTORS

Dave Asprey - Chairman

Filomena Trindade, MD, MPH - Secretary

Bill Grant - Publicity, Treasurer

Susan Downs, MD, ABOIM - President

Larry Weissenborn - Sound

Robert Menkemeller, RNC

FOUNDER

Kathryn Grosz

ADVISORY BOARD

Bill Grant, PhD

Phillip Lee Miller, MD

Alan P. Brauer, MD

Bernd Friedlander, DC

MEETING MODERATORS

Robert Menkemeller, RNC

Randy Kunkee

VOLUNTEERS

Rob Baum, Assistant Editor

Ruthellen Dickinson, Greeter, Memberships

Susan Downs, Newsletter Editor/Prgm Editor

Steve Fowkes, Technical Advisor

Bill Hurja, Refreshments

Rob Larson, Equipment Manager

Robert Menkemeller, Website

Larry Weissenborn, Audio Engineer

Sandra Yow, Newsletter Layout

Pamela Zuzak, Video & Book Sales

If you have questions please email:

susanrdowns@hotmail.com

Thank you.

Main Presentation Speaker: Steve Blake, ScD!



Steve Blake, ScD is research director for the Neuroscience Nutrition Foundation (http://neurosciencenutrition.org/). He has offered many classes at the University of Hawaii. He has designed the Hawaii Dementia Prevention Trial, a clinical study at the Hawaii Alzheimer's Disease Center. He has been personally involved in conducting this clinical trial using dietary changes and with nutrients found in his targeted nutritional supplement Brain and Body Food.

Steve Blake is author of the 2008 McGraw-Hill textbook "Vitamins and Minerals Demystified." He is also the author of Mastering Migraines, Parkinson's Disease: Dietary Regulation of Dopamine, How NOT to get a Heart Attack, Arthritis Relief, Nutrients for Dementia, Stop Strokes before they Start, and Fats and Oils Demystified. He has written Mosby's Alternative Remedies and is co-author of Mosby's Drug Guide for Nurses, 4th edition.

Steve Blake authored the Diet Doctor, software for analyzing dietary nutrients. This software allows detailed analysis of your dietary fats, tocopherols, carotenoids, and many other nutrients. He has also maintained one of the world's largest databases of plants used medicinally, called the Herb Doctors.

Steve Blake studies scientific research on the connections between food and disease. He sees himself as a translator of the medical literature into understandable, science-based language. Steve Blake attended the University of California. He is a research specialist in nutritional biochemistry. He lives on a solar-powered, organic farm on Maui with his wife Catherine. Email: steve@DrSteveBlake.com. Website: www.DrSteveBlake.com and www.NeuroscienceNutrition.org/.

(End of Meet Steve Blake!)

Main Presentation by Steve Blake, ScD

"Brain and Body Nutrients in Popular Diets"

There are many popular diets that people try, often to lose weight. Many of these diets contain low enough calories to initiate weight loss. I am going to answer the question: which of these diets supply the essential nutrients needed by humans? Another excellent question is: do these diets supply excess amounts of potentially damaging dietary components?

Nutrients to Protect Our Brains and Bodies

Folate and Vitamin B12

To reduce our risk of Alzheimer's disease, we need two essential B-vitamins: folate and vitamin B12. These two B-vitamins work together to convert homocysteine to s-adenosylmethionine (SAMe). SAMe goes on to quench the genes that promote amyloid plaques in Alzheimer's disease. It is wise to supplement vitamin B12 on any diet. Folate can be low if only small amounts of vegetables, grains, and beans are eaten. The South Beach diet and the Zone diet were both a little low in folate. The Atkin's diet and the standard American diet can be quite low in folate. The other seven diets that I analyzed for this presentation supplied sufficient folate.

Vitamin E

Vitamin E is crucially important for protection of our brain cells from damage and cell death. Among the eleven diets that I analyzed for this presentation, only two diets supplied the bare minimum daily need for vitamin E (15 mg = 22.5 IU). Only the two plant-based diets supplied enough: 20 mg and 45 mg of vitamin E.

Vitamin E is also important for reducing oxidation of low density lipoprotein (LDL) to reduce risk of heart attacks and strokes. Dietary vitamin E has always been found to be protective, while the synthetic alpha-tocopherol form of "vitamin E" used in many supplements is not very helpful.

Carotenoids

Carotenoids are found in colorful pigments of fruits, vegetables, and roots. Carotenoids are important fat-soluble antioxidants that can help protect our brains from memory loss and shrinkage. Some of these carotenoids can be converted into vitamin A, such as alpha- carotene and beta-carotene. Other carotenoids are valuable as antioxidants, such as lutein, zeaxanthin, and beta-cryptoxanthin. Four of the eleven diets were too low in carotenoids to be protective: the standard American diet, the Zone diet, a poor vegetarian diet, and the Atkin's diet.

Minerals for Antioxidant Enzymes

Antioxidant enzymes made in our bodies protect our brains and all of our cells. Two of the most important enzymes that we biosynthesize are glutathione peroxidase and superoxide dismutase. These enzymes will not function without a constant intake of four minerals: zinc, copper, manganese, and selenium. Zinc was too low in the Atkin's diet, the Paleo diet, a poor vegetarian diet, the Mediterranean diet, one plant-based diet, and a very low fat diet.

Manganese is especially important to protect the delicate mitochondrial membrane, crucial for energy production. Manganese was low in the standard American diet, the Paleo diet, the South Beach diet, a poor vegetarian diet, and extremely low in the Atkin's and Bulletproof diets. Sufficient selenium was found in all of the diets that I analyzed for this presentation. Copper was deficient only in the Atkin's diet. Let's make sure to get these four minerals daily to protect our brains and body.

Vitamin C

Vitamin C is necessary for antioxidant protection of the watery areas of our body, such as the bloodstream and inside cells. Vitamin C is also crucial to recharge vitamin E for protection of our brain cells. Vitamin C was too low in the standard American diet, the Atkin's diet, a poor vegetarian diet, and the very low fat diet. These diets did not include enough fruits and vegetables. The diets with the most vitamin C were the two plant-based diets, the Zone diet, the Paleo diet and the South Beach diet.

Polyphenols

Polyphenols are important to keep memory sharp. Polyphenols are found in plant foods only. Polyphenols include the large family of beneficial flavonoids. Anthocyanidins are dark pigments in berries that have been shown to protect memory. Diets abundant in polyphenols will contain fruits, vegetables, beans, coffee, tea, and berries.

Calcium, Protein, Sodium, and Bones

Calcium, magnesium, vitamin K, and other nutrients are needed for healthy bones. Excess sodium and protein can deplete calcium in bones. The exact amounts and mechanisms of this depletion can be found in the textbook that I authored for McGraw-Hill: Vitamins and Minerals Demystified.

When calcium depletion by excess sodium and protein is taken into account, several of the diets analyzed showed a net decrease of calcium. Calcium was depleted in three of the diets: Atkin's (-319 mg), Bulletproof (-796 mg), and Paleo (-240) each day. This is a risk factor for osteoporosis. When the Zone and South Beach diets were corrected for protein and sodium intake, they only provided about 300 mg of calcium daily, versus a need between 800-1200 mg daily. The other diets were not so deficient in calcium.

Several of the diets were a little low in magnesium. The Atkin's diet stands out as being extremely low in magnesium. Low magnesium is a factor in brittle bones.

Fiber

Humans need sufficient fiber for smooth digestion. The soft, soluble fiber found in fruits, vegetables, beans, nuts, and seeds is the healthiest kind of dietary fiber. We need a minimum of 20 grams of fiber daily. A healthy amount of dietary fiber is 40 or more grams daily. This amount will help reduce the risk of bowel cancer, constipation, diverticulosis, and hemorrhoids. The absolutely most deficient diet for dietary fiber is the Atkin's diet with only 0.15 grams of fiber daily. The cheesy, eggy vegetarian diet and the standard American diets barely had the minimum of about 20 grams of fiber daily. The Zone, Paleo, and Bulletproof diets contained only 21-28 grams of fiber—far short of a healthy minimum of 40 grams. The plant-based diets had the healthiest amount of fiber with 55-77 grams of daily fiber. The Mediterranean diet and the South Beach diets had adequate fiber of about 40 grams daily.

Potentially Damaging Excesses

Saturated Fat and Brain Arteries

One common form of dementia is vascular dementia. Vascular dementia occurs when high dietary saturated fat increases atherosclerotic plaque (arterial clogging). Over time, small arteries can become blocked by clots forming around arterial plaque. These tiny strokes can erase memory and interfere with thinking ability. Transient ischemic attacks, tiny strokes, can also become worse with higher saturated fat in the diet. Devastating stokes are much more likely with more arterial clogging. Of course, clogged arteries may also interfere with blood flow to the brain.

Saturated fat guidelines

Guidelines of the American Heart Association, the World Health Organization, the Institute of Medicine, and many expert panels have set the upper limit of dietary saturated fats somewhere between six and ten percent of calories. In a normal 2200 calorie diet, this works out to 15 to 24 grams of dietary saturated fat daily. I try to keep my saturated fat intake between 4 and 6 percent of my calories, about 10-15 grams daily, to protect my brain and arteries.

It is safest to keep saturated fat below 7 percent of calories

The Atkin's diet contains the most damaging amount of saturated fat—23 percent of calories as saturated fat. The Bulletproof diet has 19 percent of calories from saturated fat. A cheesy, eggy vegetarian diet had 15 percent of calories from saturated fat, while the standard American diet had 14 percent. The Zone, Paleo, and South Beach diets had around 10 percent of calories as saturated fat—high, but not as dangerous and some of the other diets. The Mediterranean diet came in with a fairly healthy 8 percent saturated fat. The two plant-based diets came in with a super healthy 4 and 6 percent of saturated fat. The very low fat diet had only 2 percent of calories as saturated fat. Humans have no dietary requirement for saturated fat.

Protein

Protein is a necessary daily nutrient. All of the diets examined contained plenty of protein. Only the very low fat diet was a little low in protein (45 g vs. 46 g). This very low fat diet contained only about half the calories needed (1080 vs. 2200).

Worldwide estimates of necessary and sufficient protein are quite in agreement that 10 percent of calories is plenty. This works out to about 50 grams of protein needed daily. Even the plant-based diets provided a generous 74 to 81 grams of protein daily.

Excess protein can be a problem with osteoporosis because excess protein can leach calcium out of bones. Excess protein can contribute to fatigue. Excess protein is well-known to decrease dopamine production in the brain. This can lead to a worsening of Parkinson's disease symptoms and mood disorders.

The most extreme excess protein found in these 11 diets was found in the Bulletproof diet with a staggering 235 grams daily (compared to the 50 g needed). Many of the diets contained between 140 and 150 grams of protein daily. This is an excess of about 100 grams. The Mediterranean diet contained 100 grams of protein, only 50 extra grams. Only the two plant-based diets contained less than 85 grams of protein, approximating our human needs with plenty to spare.

Which Diets Are Healthiest For Our Brains and Bodies?

Clearly, the whole-plant diets most closely approximate our human needs for nutrition. This is in agreement with the research showing that those following whole-plant diets have the lowest rates of disease—especially the major killers, such as heart attacks, cancer, and strokes. To learn more, please come to the presentation on October 19th, 2017.

www.DrSteveBlake.com.

Editors' Comments

While the negative health consequences of saturated fats has been the conventional wisdom for decades (since Ancel Key's flawed study decades ago, bribed by the sugar industry) - it is no longer considered an absolute by most people who keep up with health science. Cochrane. org (meta analysis) looked at everything and it had quite mixed results - Some believe that lowered cholesterol is indeed a health risk as cholesterol is needed for cell membranes and hormone production.

"The review found that cutting down on saturated fat led to a 17% reduction in the risk of cardiovascular disease (including heart disease and strokes), but no effects on the risk of dying."

http://www.cochrane.org/CD011737/VASC_effect-of-cutting-down-on-the-saturated-fat-we-eat-on-our-risk-of-heart-disease

Guidelines from AHA or IOM cited by Blake are controversial as recent papers show that the sugar industry has been coercing academic researchers to publish in favor of the sugar industry https://www.ncbi.nlm.nih.gov/pubmed/28595992 and that the sugar industry was pressuring to influence WHO guidelines. This is a very common theme in the US - as can be seen in the tobacco industry, GMO research and EMF research.

There is no agreement that whole-plant diets are most healthy, despite whatever was in "the China Study" - this is not at all settled science, although the research is quite interesting, and may offer some people significant health improvements. While it is probably true that optimal diets vary by the individual, our second speaker, Bill Grant will certainly weigh in on this issue advocating for a plant based diet.

(End of Main Presentation)

Secondary Presentation Speaker: William Grant, PhD!



William B. Grant has PhD in physics from the University of California, Berkeley (1971). He had a 30-year career in atmospheric sciences with an emphasis on laser remote sensing of atmospheric constituents such as ozone and aerosols, with positions at SRI International (1973-79), the Jet Propulsion Laboratory/California Intitute of Technology (1979-89) and NASA Langley Research Center (1989-2004).

He turned to health research in 1996, publishing the first paper linking diet to risk of Alzheimer's disease in 1997, followed by studies of sugar, fat and coronary heart disease in 1998, and animal products and cancer risk in 1998. In 1999 he turned his attention to the role of solar ultraviolet-B exposure in reducing risk of many types of cancer through production of vitamin D in 2002. After retirement from NASA in 2004, he moved to San Francisco and formed the nonprofit organization Sunlight, Nutrition and Health Research Center (www.sunarc.org), where he spends most of his time studying the role of solar UVB exposure and vitamin D in reducing risk of cancer and many other types of disease. He also investigates the role of diet in risk of Alzheimer's disease and cancer. He has about 300 health publications listed at www.pubmed.gov, of which 210 are related to vitamin D, with 78 of these also on ultraviolet radiation and human health, and 41 to diet and disease.

(End of Meet William Grant!)

Secondary Presentation by William Grant, PhD

"Vitamin D"

Vitamin D is a vitamin that improves most of the contributing factors to chronic disease
including inflammation and oxidative stress. It has been shown to be beneficial in conditions
such as autism, diabetes mellitus, cardiovascular disease, depression, psoriasis, osteoporosis
respiratory tract infections, cancer, Alzheimer's Disease, food allergies, and pregnancy.

(End of Secondary Presentation)

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.

Become a Member!

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 provide your email address as well.

Annual Membership \$60 (per household) \$10 per Meeting

Benefits: Access to a community of experienced scientists and physicians who share information and similar interests.

Join Us! First time Visitors and Non-Members \$10 per meeting (at door), Or sign up for an Annual Membership for \$60 per year.

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."

Annual Membership \$60 (per household).

Benefit: Access to a community
of experienced scientists and physicians
who share information and similar interests and
FREE admission to all meetings!

Donations are welcome!
Please send your donations to:
Bill Grant

1745 Pacific Ave. APT 405 San Francisco, CA 94109-2401

Renew your membership today!

Complete this form & bring to a future meeting with payment:
\$60/year full membership (maximum 4 per household)
Yes, you can renew and pay in person at a meeting.

NAME:	_
ADDRESS:	
CITY:	
PHONE: PHONE 2:	
EMAIL:	
CREDIT CARD #:	
Circle Card Type: Visa MC Name on card, if different:	
Phone on card, if different:	
I authorize this charge (Signed):	DATE:
Total amount authorized or enclosed: \$, (chec	ck applicable boxes):
\$60/yr Family membership (4 max in household) Donation: \$	

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

Please send your donations to:

Bill Grant

1745 Pacific Ave. APT 405

San Francisco, CA 94109-2401