

Vegetarian Nutrition Update

Volume XIX, Number 4, 2011

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Continuing Professional Education (CPE) Article:

The Contribution of Dietary Studies in Seventh-day Adventists to Vegetarian Nutrition

Ella H Haddad, DrPH, Associate Professor, Dept of Nutrition, Loma Linda University

The attitude of dietetic professionals towards vegetarian diets has changed in recent years. Compared to the 1980 position statement of the American Dietetic Association (ADA) which raised doubts about the adequacy and benefit of vegetarian eating (1), the most recent ADA position paper on vegetarian diets, published in 2009, views vegetarian diets more positively (2). This transformation is partly due to dietary adequacy assessments conducted on vegetarians and partly to prospective epidemiologic studies particularly those on Seventh-day Adventists (SDAs), many of whom are vegetarian. These studies provide compelling evidence that balanced vegetarian diets are not only nutritionally adequate but are also associated with lower risks of chronic diseases when compared to typical U.S. diets (2).

This article will examine studies of SDAs in the United States and will address common questions including:

- Why study the Adventists?
- How many cohort studies on Adventists are there?
- What are the major findings?
- And what does it all mean to vegetarians?

Why are Adventists an important population to study?

SDAs are members of a Christian denomination, established in 1863, that from its beginnings was distinguished by an emphasis on health. Church teachings encourage vegetarian eating practices and forbid the use of alcohol and tobacco. According to Walter Willett, MD, DrPH, of Harvard University, the primary justification for studying Adventists is that the range of diets consumed by Adventists is unique and distinct from the range

of typical U.S. diets (3). Compared to the general population in the United States, a substantial percentage of SDAs are vegetarian. Vegetarian SDAs adhere to a variety of eating patterns ranging from simple avoidance of animal flesh to strict vegan diets which eliminate meats and all dairy products; all this with a virtual elimination of confounding from smoking or alcohol use. Among SDAs there is also a large variation in the consumption of plant foods such as soy, nuts, legumes and grains. Therefore, the underlying rationale for this research is that the range of diets consumed by Adventists is both broad and different from that of other Western populations.

How many prospective studies on Adventists are there?

To date, there have been three separate cohorts of Adventists whose dietary practices and health outcomes have been tracked in the US. There have also been studies on Adventists in the Netherlands, Germany, Norway and other countries. Started in 1958, the first large epidemiological study on Adventists recruited about 23,000 non-Hispanic white members in California and was called the Adventist Mortality Study (AMS). It collected mainly mortality data. The next cohort of approximately 34,000 individuals formed in 1974-1976 was the Adventist Health Study-1 (AHS-1) and again only included non-Hispanic white California participants. It collected all incident events, nonfatal and fatal. The more recent Adventist Health Study-2 (AHS-2), begun in 2002, is a prospective cohort of over 96,000 adult Adventists from all fifty states and Canada. It includes mainly whites (72%) and blacks (26%) with small numbers of other ethnic groups. The

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Message from the Chair

Debbie Lucus, MS, RD, CDE
2010-2011 VN DPG Chair

Have you noticed how much positive vegetarian diet information has been hitting the news lately? Were you as excited as I was to see the vegetarian and vegan eating patterns included in the newly updated *Dietary Guidelines for Americans, 2010*? Did you watch or hear about Oprah and staff accepting a vegan challenge for a week? As plant-based diets gain more press, our clients will be seeking information on changing to this more healthful eating pattern. Who better than registered dietitians and dietetic technicians, registered, to provide them this assistance? This is just one more opportunity for our members, as the vegetarian nutrition experts, to help clients move toward more plant-based diets and provide them with evidence-based information. I know

that a record number of patients whom I counsel in an outpatient diabetes center here in California have been asking about vegetarian resources in recent weeks. This makes my job particularly rewarding and the health outcomes couldn't be better!

The Vegetarian Nutrition Dietetic Practice Group (VN DPG) is working to keep up with the needs of our members and the public for more up-to-date vegetarian information. Our website and newsletter continue to offer outstanding articles containing current research on plant-based diets and listings of the most recent studies. We are also continuing to create and revise our RD and Consumer Resources. If you haven't seen the latest versions, they can be downloaded from

our website, www.vndpg.org. There is certainly a need for further vegetarian nutrition research and you will find in this newsletter a mid-term report from Mele Fernandez, RD, a VN DPG Research Grant recipient. You can help to keep the research grant sustainable by making a tax-deductible donation to the grant fund. See the website for details.

The VN Executive Committee has been working hard on updating our Strategic Plan to help meet the growing needs of our members. We will be expanding our E-mentorship program to provide an even better program for mentors and mentees. Our State Coordinator program still continues to grow and I encourage you to look into being a State

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Newsletter Deadlines

Summer 2011 issue:
Materials due by May 22, 2011
Fall 2011 issue:
Materials due by August 22, 2011

Subscription Information

Subscription year runs June 1 - May 31. Individuals not eligible for ADA membership may subscribe by sending a check for \$30 payable to The American Dietetic Assoc/ DPG-14. Checks should be sent to Meredith Hink, 3111 South Meadow Lark Lane, Holmen, WI 54636.



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Editor:

Reed Mangels, PhD, RD, FDA

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We welcome submissions and articles from our members. Please contact the editor:

Reed Mangels
117 Cherry Ln.
Amherst, MA 01002
E-mail: reedmangels@comcast.net

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Return address information:

Reed Mangels
117 Cherry Ln.
Amherst, MA 01002
E-mail: reedmangels@comcast.net

Message from the Chair, continued from page 2

Coordinator. It is very rewarding and a good way to make contact with other VN members in your state. More continuing education opportunities will be available for our members to help you to stay up-to-date on the latest research.

VN wouldn't be possible without all of the excellent and dedicated volunteers and members. Thank you to the enthusiastic Executive Committee, State Coordinators, E-mentors and mentees, newsletter and website staff, bloggers and members for making your contributions to the VN DPG. If you have suggestions for changes, improvements or enhancements to the VN DPG, please feel free to contact me at dsl-rd@hughes.net I would love to hear your ideas.

From the Editor

Reed Mangels, PhD, RD, LDN, FADA

Welcome to our Spring newsletter – the second of two that you'll receive electronically this year. We're testing this change, both as a way to save money and as a way to save paper. Please contact me or any member of the VN Executive Committee to let us know how you feel about our electronic newsletter.

A sharp eyed reader pointed out a duplicate paragraph in the RD Resource that was included in the winter newsletter. A corrected version of this Resource is available on the VN Members' section of the website (<http://vndpg.org>).

This issue features a fascinating article on studies of Seventh-day Adventists and the contribution of these studies to the

vegetarian nutrition knowledge base. You have asked for more CPE credits and we've listened – this article has been approved for 1 hour of CPE credit.

I am delighted to have Julia Driggers, RD join our editorial staff. This issue features her first Veggie Bites column.

The unsung heroes of this, and every issue, are our reviewers. They carefully read each article for accuracy, clarity, and mechanics. They have high standards and make sure that our newsletter is one we all can be proud of. Thanks to Catherine Conway, MS, RD, CDN, CDE; Sarah Ellis, MS, RD; Janet Lacey, DrPH, RD, LDN; Debbie Lucus, MS, RD, CDE; and Sudha Raj, PhD, RD.

VN Students

Monique Richard

I thought this student column should focus on what we need to be thinking about to prepare for the future as interns and professionals. What better way to achieve this than by listening to someone who is well-respected and experienced in the field? For the last two years, I have had the pleasure of working and learning from the owner of Allison Nutrition, in Nashville, Nan Allison RD. Here are her responses to my questions about preparing for the future:

What do you wish someone told you before applying /completing an internship? You will need a mentor. Find a mentor! It's not just about nutrition knowledge but how to manage time, people, and resources. It is an opportunity to learn leadership.

How do you suggest finding a program or mentor that fits? Look around to see whose spirit, energy or work looks inspiring and clicks with you.

What were the biggest challenges you faced as a dietetic intern? Organization of time and making presentations.

What do you see as a growing/future trend in dietetics? Informatics, marketing nutrition messages, in-home nutrition services, personal coaching via Internet, and integrative nutrition - more holistic, real food, hands-on approach.

Why do you believe it is critical that all registered dietitians be familiar with vegetarian and vegan diets? More and more individuals are becoming vegetarian for a variety of reasons and restaurants, food manufacturers, and grocery stores are responding to the change. It will need to be a consideration not just in normal nutrition education, but in medical nutrition therapy.

Where do you see the greatest need for registered dietitians? Everywhere... least of all hospitals...they are still needed, but this is not the area where growth in the profession is needed. I vote for public policy. Also RD's are needed in worksite wellness, local gyms/YMCA's, schools, grocery stores – where people live and work and play.

In your 22 years as a registered dietitian, what have you enjoyed the most?

Worksite wellness programs, public policy, and lobbying.

What is left for you to tackle? I would like to become a chief nutrition officer of a company, working with their administration to integrate nutrition into the work life, the company culture, and medical benefits; to be the "go-to" place for nutrition services and resources in the community. This means tackling a whole new challenge of insurance, personnel management, and business administration.

Words of wisdom you would like to share with our readers? Get all the experience you can. Find a mentor, or two. This is a wide-open field. Develop some other skills to complement your nutrition knowledge, such as counseling, writing, speaking, management, leadership.

Look toward the next issue for more insider tips, inspiration, and real-life experiences to assist in your success as an intern and future RD! Questions, comments, ideas? Contact me at mmr2v@mtsu.edu.

major aim of AHS-2 is to relate usual dietary habits to cancer outcomes (4).

What relevance are the studies on Adventists to vegetarians?

For the past almost five decades, these studies have provided compelling evidence that vegetarian diets are associated with lower risk of certain diseases. Approximately half of the participants of AMS were lacto-ovo vegetarians. This study was the first to show that the risk of coronary heart disease (CHD) mortality was significantly lower in vegetarian compared to nonvegetarian SDAs. The risk of fatal CHD among nonvegetarian SDA males, ages 35 to 64 years, was three times greater than in vegetarian SDA males. However, differences among female vegetarians compared to nonvegetarians were much smaller (5). A twenty-one year follow-up of participants showed a positive association between meat consumption and all-cause mortality in both genders, albeit the association was stronger for men than for women. All-cause mortality also showed a significant positive association with egg intake and a negative association with consumption of green salad (6, 7).

The AHS-1 cohort, which was tracked for 12 years, provided a rich source of data on the protective effect of plant diets. The study found that vegetarians had lower risks of obesity, hypertension, and diabetes, and of death from all causes (8). As related to beef consumption and heart disease outcomes, gender differences were noted. In men, but not in women, the risk of fatal heart disease was significantly related to beef intake; those men who consumed beef three or more times per week had a 2.3 times greater risk of dying than vegetarian men (8). The study also clearly showed that regular nut (9) and whole-grain (9, 10) consumption were associated with lower risk of CHD. Vegetarian dietary practices have been interpreted to mean an absence of meat. However, individuals who exclude meat or dairy or both from their diets may eat differently from the other food groups as well. Vegetarians consume more whole grains, fruits, vegetables, and nuts—foods that may contribute to the protective effect of vegetarian diet.

Consistent with other prospective studies, AHS-1 found that the risk of colon cancer was increased by 88% in nonvegetarian compared to vegetarian SDAs. On multivariate analysis, independent associations were observed for red and white meats, suggesting that both red meat and white meat intake may increase the risk of colon cancer. On the other hand, legume consumption had a protective effect against colon cancer (8). The hypothesis that dietary fat or red meat intake is associated with the high rates of breast cancer seen in the United States was not supported. Neither childhood nor early teenage vegetarian lifestyle related to subsequent adult risk of developing breast cancer. Overall, no dietary factors except for obesity impacted breast cancer risk (11). With regard to prostate cancer, there also was no link to vegetarian status; however, the consumption of legumes, tomatoes and dried

fruit was associated with significantly decreased prostate cancer risk (12).

Vegetarian eating patterns may also impact life expectancy. Overall, white SDA men lived 7.3 years and white SDA women lived 4.4 years longer than the average white California man and woman (13). Since the Adventist lifestyle includes a number of protective practices, how much of this increased longevity is due to the vegetarian lifestyle *per se*? It has been estimated that long-term adherence (i.e. greater than 17 years) to meatless diets contributes to about a 3.6 year increase in life expectancy in this cohort of white California SDAs (14).

Recruitment to the study has been completed, but the 2nd Adventist Health Study is still in its early stages of data collection. Unlike the previous cohort, AHS-2 is not limited to California, and subjects were recruited from all states in the contiguous United States and Canada. Although the self-administered food frequency questionnaire (FFQ) is a practical tool for assessing individual diets in large cohorts, it is not precise. In order to reduce measurement error associated with its use, the AHS-2 intends to fully validate the FFQ by comparison to repeated 24-hour recalls and to biological markers obtained on a subsample of the participants (15). This is expected to improve risk estimates of the influence of dietary exposure on disease outcomes. The role of soy and various phytochemicals with regard to cancer outcomes will be examined in detail. Study results will be published over the next decade. One unique feature of this study is the enrollment of a large number of participants exhibiting a wide range of dietary patterns. The distribution of the study diets among the over 96,000 participants is as follows:

- Vegans: 8%
- Lacto-ovo vegetarians: 28%

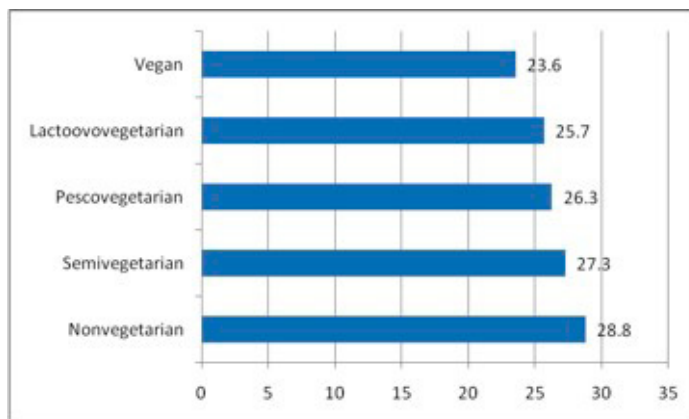


Figure 1. Mean BMI in kg/m² of different types of vegetarians in AHS-2 study cohort

Data from reference (16)

continued on page 5

- Pescovegetarians and semi-vegetarians (meat < one time per week): 16%
- Nonvegetarians: 48%

During the follow-up period of the AHS-2 cohort, cases of incident cancers at many sites will be documented. This information will take years to accrue. However, some preliminary findings based on prevalence at baseline obtained by self-report have been published. For example, previous data have shown that vegetarians tend to be thinner, or less obese, when compared to nonvegetarians within the same study. Preliminary results from the AHS-2 cohort are shown in Figure 1. Body mass indexes in kg/m² were calculated from self-reported heights and body weights. It is quite evident that as the amount of animal foods decreases in the diet so does body weight (16).

The prevalence of self-reported type 2 diabetes among AHS-2 participants showed similar trends to BMI and increased from 2.9% in vegans, 3.2% in lacto-ovo vegetarians, 4.8% in pescovegetarians, 6.1% in semi-vegetarians to 7.6% in nonvegetarians (Figure 2). What is more striking is that after adjustment for factors such as age, gender, ethnicity, physical activity, BMI etc., the odds ratio for type 2 diabetes was 0.51 in vegans and 0.54 in lacto-ovo vegetarians compared to nonvegetarians (16). This means that vegan and lacto-ovo vegetarian diets are associated with nearly one-half the risk of type 2 diabetes. Similar trends were seen in those reporting being treated for hypertension. Vegans had 0.25 and lacto-ovo vegetarians 0.45 relative risk for hypertension compared to nonvegetarians in the study (17).

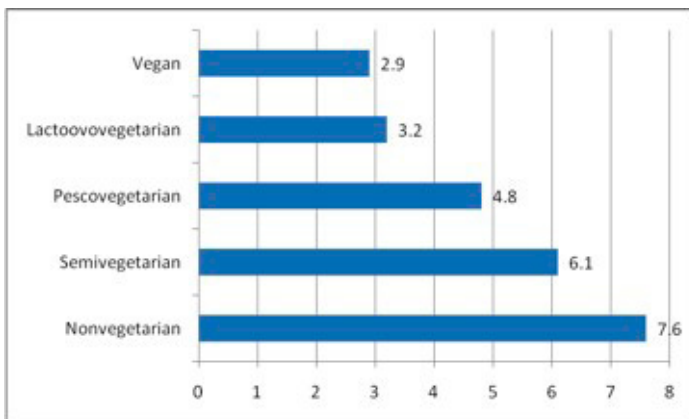


Figure 2. Prevalence (%) of self-reported type 2 diabetes in AHS-2 study population by diet

Data from reference (16)

There is still much to be learned. The use of a validated FFQ tool and biomarkers to track a larger number of participants from all over the United States and Canada is expected to

greatly advance our understanding of diet disease relationships. Excluding meat will not be the only factor examined. It is also important to avoid grouping together individuals under one label (i.e., vegetarian) who may eat in different ways and patterns. It is hoped that AHS-2 will provide a better understanding of the protective effects of fruits, vegetables, whole grains and nuts.

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The Contribution of Dietary Studies in Seventh-day Adventists to Vegetarian Nutrition, continued from page 5

This activity has been approved for 1 hour of continuing professional education credit for registered dietitians and dietetic technicians, registered, by the Commission on Dietetic Registration. Completed quizzes must be returned within 1 year of their appearance in Vegetarian Nutrition Update in order to be eligible for credit. After reading the continuing professional education article, please answer the quiz questions by indicating your responses on the self-assessment form on the Members' Section of our website <http://vndpg.org/>. Further instructions are available on the website.

The Contribution of Dietary Studies in Seventh-day Adventists to Vegetarian Nutrition

Reader Comprehension Questions

- Which of the following most accurately describes dietary practices recommended by the Seventh-day Adventist church?
 - Abstaining from consuming soft drinks
 - Eliminating all meats and dairy products
 - Following a diet that emphasizes dairy products
 - Following a vegetarian diet
- Prospective cohort studies of Seventh-day Adventists have tracked what kind of outcome data?
 - dietary practices
 - fatal and non-fatal incident events
 - ethnicity and income level
 - cancer treatments
- Results from the first AMS cohort showed:
 - significantly higher all-cause mortality in vegetarians as compared to nonvegetarians
 - significantly lower CHD mortality in vegetarian males as compared to nonvegetarian males
 - all-cause mortality negatively associated with consumption of eggs and meats
 - CHD mortality positively associated with consumption of green salad
- As shown by the AHS-1 cohort, consumption of which foods were linked with lower CHD risk?
 - fruits and vegetables
 - whole grains and nuts
 - low-fat milk and eggs
 - all of the above
- According to the AHS-1 cohort, red meat consumption is linked to an increased risk of what type of cancer?
 - prostate
 - breast
 - thyroid
 - colorectal
- What feature of the AMS and AHS-1 cohort groups may limit the ability to generalize the results?
 - The studies only enrolled non-Hispanic whites
 - The studies only enrolled regular church attendees
 - The studies only looked at dietary practices
 - The studies only looked at cancer outcomes
- Preliminary results from the AHS-2 cohort have shown:
 - documented cases of incident cancers
 - consistently lower BMI in nonvegetarians when compared to vegetarians
 - consistently lower BMI in vegetarians when compared to nonvegetarians
 - documented cases of obesity
- Which of the following most accurately describes prevalence of type 2 diabetes in the AHS-2 cohort?
 - is reduced for pescovegetarians
 - is similar to BMI trends
 - is related to meat consumption
 - is higher in vegans
- In studying diet-disease relationships, which of the following is most important to do?
 - avoid grouping together subjects who have dissimilar eating patterns
 - include vegetarians and vegans as study participants
 - study Seventh-day Adventists and other Christian groups
 - define incidence measurements for heart disease, diabetes and cancer

Answers are on page 18.

Thank you to:

- Ella H. Haddad, DPH for developing this CPE article
- Rachel A. Kossover, MPH, RD for developing Reader Comprehension Questions
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- Jay Sutcliffe, PhD, RD for preliminary review and assistance with planning for this article

Other Published Nutrition Research Using Adventists Conducted Outside the United States, 1991-2011

Reed Mangels, PhD, RD, LDN, FADA

Location of study: Zimbabwe

Study description: 194 male, 299 postmenopausal female Seventh-day Adventists (SDA) were compared to similarly aged participants from NHANES III. 10.8% of SDA males and 9.0% of SDA females reported being vegetarian.

Major results: Serum ferritin concentrations of non-alcohol drinking SDA black Africans were significantly lower than serum ferritin concentrations of non-alcohol drinking African-Americans ($P < 0.0005$). Based on a serum ferritin concentration of less than 12 mcg/L, the proportion of subjects with iron deficiency was significantly higher in SDA Zimbabwean subjects (3.3%) when compared to their American counterparts (1.0%; $P = 0.002$).

For more information see: Moyo VM, Mvundura E, Khumalo H, et al. Serum ferritin concentrations in Africans with low dietary iron. *Ann Hematol.* 2009;88:1131-6.

Location of study: Warsaw, Poland

Study description: 30-50 year old male SDA. Dietary assessment was conducted.

Major results: Intakes of selected nutrients by SDA males did not differ from Polish recommendations.

For more information see: Słociak E, Bartnikowska E. Dietary assessment of males from Seventh-Day Adventist Church in Warsaw. *Rocz Panstw Zakl Hig.* 2008;59:361-6.

Location of study: Sydney and Melbourne, Australia

Study description: Three independent, cross-sectional, screening surveys conducted by Sydney Adventist

Hospital in 1976, 1986 and 1988 and a survey conducted among residents of Melbourne in 2006. Subjects: 252 SDA and 464 non-SDA in 1976; 166 SDA and 291 non-SDA in 1986; 120 SDA and 300 non-SDA in 1988; and 251 SDA and 294 non-SDA in 2006.

Major results: The mean BMI of non-SDA men increased between 1986 and 2006 ($P < 0.001$) but did not change for SDA men or non-SDA women. SDA women's mean BMI increased between 1988 and 2006 despite their more prudent diet.

For more information see: Kent LM, Worsley A. Does the prescriptive life-style of Seventh-day Adventists provide 'immunity' from the secular effects of changes in BMI? *Public Health Nutr.* 2009;12:472-80.

Location of study: Barbados

Study description: 407 SDA males and females, 18-74 years old; Measurements: Blood pressure, glucose, and lipids; Self-reported exercise

Major results: No significant association was found between exercise and blood glucose, blood pressure, and cholesterol levels of participants.

For more information see: Modeste NN, Brathwaite N, Fraser HS, et al. Exercise, blood sugar, blood pressure, and cholesterol levels in a Caribbean population. *Int J Community Health Educ.* 2006-2007;27:75-86.

Location of study: Barbados

Study description: 407 SDA males and females, 25-74 years old. 153 (37.6%) participants were male, and 254 (62.4%) were female, and 43.5% were vegetarians.

Major results: Prevalence of diabetes and hypertension were lower among vegetarians, compared to nonvegetarians. Vegetarians were, on average, leaner than nonvegetarians whether vegetarians were identified by definition ($P=0.04$) or by self-report ($P=0.009$).

For more information see: Brathwaite N, Fraser HS, Modeste N, et al. Obesity, diabetes, hypertension, and vegetarian status among Seventh-Day Adventists in Barbados: preliminary results. *Ethn Dis.* 2003;13:34-9.

Location of study: Australia

Study description: Vitamin B12 status of 340 SDA ministers was measured

Major results: 245/340 were either lactoovo vegetarians or vegans who were not taking vitamin B-12 supplements. Fifty-three percent had serum vitamin B12 values below the reference range for the method used. Twenty-three percent consumed sufficient servings of vitamin B-12-containing foods to obtain the minimum daily maintenance allowance of the vitamin (1 mcg).

For more information: Hokin BD, Butler T. Cyanocobalamin (vitamin B-12) status in Seventh-day Adventist ministers in Australia. *Am J Clin Nutr.* 1999;70(3 Suppl):576S-578S.

Location of study: Nigeria

Study description: Blood pressure, plasma fibrinogen concentration, and fibrinolytic activity of 40 nonvegetarian males were compared to 36 SDA vegetarian males (8 were vegan).

Major results: Nonvegetarians had significantly lower fibrinolytic activity ($p < 0.001$) and higher plasma fibrinogen

continued on page 8

levels ($p < 0.001$). Blood pressure did not differ between the groups.

For more information: Famodu AA, Osilesi O, Makinde YO, et al. The influence of a vegetarian diet on haemostatic risk factors for cardiovascular disease in Africans. *Thromb Res.* 1999;95:31-6.

Location of study: Nigeria

Study description: Blood pressure and blood lipids of 40 nonvegetarian males were compared to 36 SDA vegetarian males (8 were vegan).

Major results: Vegans had significantly lower body weight than the nonvegan vegetarians ($p < 0.05$). Vegans had significantly lower serum total cholesterol and triglycerides ($p < 0.05$), than nonvegetarians. There were no differences in blood glucose or blood pressure among the groups.

For more information: Famodu AA, Osilesi O, Makinde YO, et al. Blood pressure and blood lipid levels among vegetarian, semi-vegetarian, and non-vegetarian native Africans. *Clin Biochem.* 1998;31:545-9.

Location of study: New Zealand

Study description: 47 SDA sex- and age-matched subjects (23 nonvegetarians and 24 vegetarians) had blood lipids, serum vitamin B12, folate, hemoglobin, and ferritin levels measured along with stature, weight and blood pressure. A quantitative 7-day diet record was also completed.

Major results: BMI was similar between groups. Male nonvegetarians had higher mean diastolic blood pressure than vegetarians. Dietary vitamin B12 intake was significantly lower ($p < 0.01$) in the vegetarian group; serum vitamin B12 levels were similar. Hemoglobin concentration did not differ by diet group. Low serum ferritin levels were

found in both female dietary groups. Blood lipid levels were similar.

For more information: Harman SK, Parnell WR. The nutritional health of New Zealand vegetarian and non-vegetarian Seventh-day Adventists: selected vitamin, mineral and lipid levels. *N Z Med J.* 1998;111:91-4.

Location of study: New Zealand

Study description: 279 European (48% men) and 231 Pacific Island people (31% men) age 39-90 years were surveyed. All were members of the SDA Church.

Major results: Age-adjusted BMI was higher in Pacific Islanders than in Europeans: ($p = 0.0001$). In Europeans, BMI was positively associated with systolic and diastolic blood pressures, triglycerides, total cholesterol, LDL cholesterol and fasting blood glucose, and negatively associated with HDL cholesterol. In Pacific Islanders, BMI was associated only with systolic and diastolic blood pressures, and with HDL cholesterol.

For more information: McAnulty J, Scragg R. Body mass index and cardiovascular risk factors in Pacific Island Polynesians and Europeans in New Zealand. *Ethn Health.* 1996;1:187-95.

Location of study: New Zealand

Study description: Official SDA church rosters were linked with the National Health Registries.

Major results: Birth weight in children born to SDA mothers was 99 g higher ($P < 0.001$) than that of matched control subjects. Total cholesterol was lower in SDA men ($P < 0.001$) and women ($P < 0.001$). Cancer incidence was not significantly lower in SDA. Total mortality was significantly lower only in SDA men ($P < 0.001$), especially cardiovascular mortality.

For more information: Fønnebø V. The healthy Seventh-Day Adventist lifestyle: what is the Norwegian experience? *Am J Clin Nutr.* 1994;59(5 Suppl):1124S-1129S.

Location of study: Norway

Study description: Coronary risk factors in SDA were compared with those in non-SDA matched controls.

Major results: SDA men and women had lower serum cholesterol levels. Blood pressure was significantly lower only in SDA women.

For more information: Fønnebø V. Coronary risk factors in Norwegian Seventh-day Adventists: a study of 247 Seventh-day Adventists and matched controls. The Cardiovascular Disease Studies in Norway. *Am J Epidemiol.* 1992;135:504-8.

CONGRATULATIONS TO THE NEWLY ELECTED VN DPG OFFICERS!

We are pleased to announce that the following VN DPG members have been elected to serve as 2011-2012 officers.

Thank you for giving your time and support to our DPG!

Chair-elect:

Christine Bou Sleiman, MS, RD

Treasurer:

Meredith Hink, MS, RD, CD

Nominating Committee Chair-elect:

Cathy Hains, MS, RD, CD

Large-Scale (more than 1000 participants) non-Adventist Epidemiologic Research Using Vegetarian Adults

Reed Mangels, PhD, RD, LDN, FADA

Health Food Shoppers Study

Subjects of this study (n=10,896) were from the United Kingdom. They were recruited between 1973 and 1979 via health food shops, vegetarian societies, and magazines and were followed for a mean of 16.8 years. Approximately 40% of subjects identified as being vegetarian. At the 10-12 year follow-up, mortality, as ascertained from National Health Service records, from ischemic heart disease (IHD) was significantly lower (approximately 30%) in the vegetarians than in the nonvegetarians; the difference was especially marked among the men. The reduction in IHD mortality associated with a vegetarian diet was not seen at the 16.8 year follow-up. Overall the cohort had a mortality about half that of the general population.

Selected references:

Key TJ, Thorogood M, Appleby PN, Burr ML. Dietary habits and mortality in 11,000 vegetarians and health conscious people: results of a 17 year follow up. *BMJ*. 1996;313:775-9.

Burr ML, Butland BK. Heart disease in British vegetarians. *Am J Clin Nutr*. 1988;48(3 Suppl):830-2.

The Heidelberg Vegetarian Study, Germany

A cohort of vegetarians and health-conscious persons in the Federal Republic of Germany was followed-up prospectively for 21 years. Subject recruitment took place between 1978 and 1981. The study included 1,225 vegetarians and 679 health-conscious nonvegetarians. Both vegetarian and nonvegetarian health-conscious groups in this study had reduced mortality compared with the general population. Vegetarian diet was associated with a

nonsignificant reduced RR of 0.70 (95% CI, 0.41-1.18) for ischemic heart disease.

Selected references:

Chang-Claude J, Hermann S, Eilber U, Steindorf K. Lifestyle determinants and mortality in German vegetarians and health-conscious persons: results of a 21-year follow-up. *Cancer Epidemiol Biomarkers Prev*. 2005;14:963-8.

Frentzel-Beyme R, Claude J, Eilber U. Mortality among German vegetarians: first results after five years of follow-up. *Nutr Cancer*. 1988;11(2):117-26.

Oxford Vegetarian Study

Subjects of this study included 6000 vegetarians and 5000 nonvegetarians from the United Kingdom, recruited between 1980 and 1984. After 12 years of follow-up, all-cause mortality in the entire cohort was roughly half that of the general population. Death rates for IHD and malignant neoplasms were significantly lower in vegetarians than in nonvegetarians.

Appleby PN, Thorogood M, Munn JI, Key TJA. The Oxford Vegetarian Study: an overview. *Am J Clin Nutr*. 1999;70(suppl):525S-31S.

The European Prospective Investigation into Cancer and Nutrition – Oxford (EPIC-Oxford)

This large study in the United Kingdom oversampled for vegetarians. Approximately 65,000 participants were recruited between 1993 and 1999. Participation in the study required the completion of a diet and lifestyle questionnaire which consisted of a food-frequency questionnaire (FFQ) as well as questions on health, family medical history and four dietary category questions: "Do you eat meat?", "Do you eat

fish?", "Do you eat dairy products?", "Do you eat eggs?". On the basis of the response to these four questions, each participant was categorized as either a meat-eater, fish-eater (does not eat meat but does eat fish), vegetarian (does not eat meat or fish) or vegan (does not eat any animal products). More than half the study participants were vegetarian or vegan, making this the largest study of vegetarians in the world. Many publications have resulted from this study. For a complete list, see the study website at <http://www.epic-oxford.org/home/>.

Analyses Combining Several Large Studies of Vegetarians

Key TJ, Fraser GE, Thorogood M, et al. Mortality in vegetarians and non-vegetarians: a collaborative analysis of 8300 deaths among 76,000 men and women in five prospective studies. *Public Health Nutr*. 1998;1:33-41.

Key TJ, Fraser GE, Thorogood M, et al. Mortality in vegetarians and nonvegetarians: detailed findings from a collaborative analysis of 5 prospective studies. *Am J Clin Nutr*. 1999;70(3 Suppl):516S-524S.

Appleby PN, Key TJ, Thorogood M, et al. Mortality in British vegetarians. *Public Health Nutr*. 2002;5:29-36.

Letters to the Editor

Have you ever wanted to comment on something you read in Vegetarian Nutrition Update? Wanted to share a new resource? Please drop us a note – we welcome letters to the editor. Please send any questions or comments to the Vegetarian Nutrition Update editor at reedmangels@comcast.net.

What's New in Research?

Compiled by Virginia Messina, MPH, RD

Non-soy legume consumption lowers cholesterol levels: A meta-analysis of randomized controlled trials. Bazzano LA, Thompson AM, Tees MT, et al. *Nutr Metab Cardiovasc Dis.* 2011;21(2):94-103.

Much of the focus on potential cholesterol-lowering effects of legumes has been on soy protein. However, other legumes have also been linked to improvements in cardiovascular health. This meta-analysis included the results of ten randomized clinical trials which compared a non-soy legume diet to a control diet for at least three weeks. A total of 268 subjects ranging in age from 18 to 78 years were included in the analysis. Subjects had high, borderline high or normal cholesterol levels. Both total and LDL-cholesterol decreased when subjects consumed diets supplemented with non-soy legumes. The pooled mean net change for total cholesterol was -11.76 mg/dL and for LDL-cholesterol it was -7.98 mg/dL. HDL-cholesterol did not change significantly. Components of legumes that may contribute to their cholesterol-lowering effects include soluble fiber and specific phytochemicals such as phytosterols.

Dietary acid load is not associated with lower bone mineral density except in older men. McLean RR, Qiao N, Broe KE, et al. *J Nutr.* 2011;141(4):588-94.

The acid-base hypothesis suggests that diets high in acid-forming nutrients elicit the release of calcium from bone as a buffer and that chronic exposure to a high dietary acid load could contribute to low bone mass. Results from studies have been inconsistent, however, possibly due to the conflicting roles for protein in bone health and effects of different levels of calcium intake. In this study, researchers used dietary intake records of subjects enrolled in the Framingham Osteoporosis Study to calculate net endogenous acid production (NEAP) and potential

renal acid load (PRAL) as well as calcium intake. There was a significant inverse relationship between bone mineral density (BMD) and NEAP for the femoral neck in older men, but no effect in women or younger men. There was no association between femoral neck BMD and dietary acid load when it was calculated using the PRAL in any groups and also no association between acid load and lumbar spine BMD in any of the groups. Calcium intake had no effect on the results. The researchers concluded that dietary acid load does not affect bone density in older women or middle-aged men and women even when calcium intake is low.

Calcium from plant sources is beneficial to lowering the risk of osteoporosis in postmenopausal Korean women. Park HM, Heo J, Park Y. *Nutr Res.* 2011;31(1):27-32.

According to the Korean National Health and Nutrition Examination Survey, calcium intake of Korean adults between the ages of 50 and 65 years is 500 mg/d which is below the recommended intake of 700 mg/d. More than one-third of Korean adults have osteoporosis. While milk intake is low in this population, Koreans consume a variety of dark green vegetables. In this case control study dietary intakes were compared between 72 patients with first time diagnoses of osteoporosis and 72 controls who did not have osteoporosis. Intake of calcium, especially from plant foods, and intake of vegetables were both associated with a lower risk of osteoporosis. The authors concluded that vegetables can be important sources of calcium in diets and that they also provide vitamins and minerals that exert protective effects on bones.

Fruit, vegetables, and olive oil and risk of coronary heart disease in Italian women: the EPICOR Study. Bendinelli B, Masala G, Saieva C, et al. *Am J Clin Nutr.* 2011;93(2):275-83.

The EPICOR study is a prospective investigation into the risk of cardiovascular diseases associated with dietary and lifestyle habits in the Italian cohort of the European Prospective Investigation into Cancer and Nutrition. The relationship of fruit, vegetable and olive oil intakes to heart disease events (fatal and nonfatal myocardial infarction and coronary revascularizations) was assessed in 29,689 women ranging in age from 35 to 74 years. Leafy green vegetable consumption was associated with a lower risk for heart disease and women in the highest quartile of consumption of these foods had a 50% lower risk compared to women in the first quartile. While consumption of olive oil was also found to be protective, the effect was not statistically significant after controlling for vegetable intake since vegetable consumption and olive oil consumption are highly correlated in Italian diets. There was no effect on risk related to fruit intake. Factors in leafy green vegetables that may confer protection against heart disease include folate, antioxidant vitamins, and potassium. Protective factors in olive oil may include its antioxidant phenolic compounds and high content of oleic acid.

The influence of creatine supplementation on the cognitive functioning of vegetarians and omnivores. Benton D, Donohoe R. *Br J Nutr.* 2010;1-6.

Creatine, found primarily in meat, fish and other animal products, can be synthesized in the body from the amino acids glycine, arginine, and L-methionine and is not an essential nutrient. However, some research has shown that muscle levels of creatine are lower in vegetarians compared to meat-eaters. Since small amounts of creatine are also found in the brain, this study examined the influence of creatine supplements on cognition in omnivores and

What's New in Research?, continued from page 10

vegetarians. Subjects (51 omnivores and 70 vegetarians, including vegans) were randomly assigned under a double-blinded procedure to receive either creatine supplements (20 g/d as 5-gram tablets spaced throughout the day) or a placebo. Tests of cognitive function were completed at the beginning of the study and at the end of the 5-day study period. On a test of memory-word recall, memory of vegetarians and omnivores was similar at the beginning of the study and remained similar in both groups if they had consumed the placebo. In the creatine-supplemented groups, memory was better in the vegetarians at the end of the study. There was no effect of creatine supplements in either meat-eaters or vegetarians on attention span, word fluency, or reaction times. Because creatine supplementation improved memory in vegetarians but not in omnivores, vegetarians may be more sensitive to creatine supplements.

Algal docosahexaenoic acid (DHA) affects plasma lipoprotein particle size distribution in overweight and obese adults. Neff LM, Culiner J, Cunningham-Rundles S, et al. *J Nutr*. 2011;141(2):207-13

Thirty-six overweight or obese adults between the ages of 18 and 65 years were enrolled in this randomized, double-blind, placebo-controlled study to examine the effects of DHA supplements on plasma lipid concentrations and lipoprotein particle concentrations and size. All subjects consumed a usual American diet that was provided for them for the 21-day study period and 19

subjects also consumed a supplement providing 2 g/d of algal DHA. There were no significant between-group differences in changes in triglycerides (TG) or VLDL, HDL, or LDL-cholesterol levels. However, in paired-sample analyses, TG levels decreased over time in the DHA group but not the placebo group. In the DHA group, mean TG level decreased by 21%. DHA supplementation was also associated with increased LDL and HDL particle sizes, higher concentration of large LDL and HDL particles, and lower concentrations of small LDL particles—all changes that may be beneficial in terms of cardiovascular risk. The authors noted that the effects on particle size can be largely explained by clearance of TG-rich particles.

Different effects of isoflavones on vascular function in premenopausal and postmenopausal smokers and nonsmokers: NYMPH study. Hoshida S, Miki T, Nakagawa T, et al. *Heart Vessels*. 2011. Epub ahead of print.

Soyfoods have been hypothesized to reduce risk of heart disease because of the effects of soy protein on blood cholesterol levels and potential effects of isoflavones on other risk factors. This study measured the effects of isoflavones (50 mg/d consumed as black soybean tea over a two month period) on endothelial function in 55 women. Improved endothelial function is associated with lower heart disease risk. In this study it was assessed by the percent change in flow-mediated dilation (%FMD) and arterial wall stiffness (CAVI) and by biochemical parameters of the blood. Isoflavone intake was associated

with an increase in %FMD among non-smokers but not in women who smoked. By contrast, isoflavone intake effectively reduced arterial stiffness in premenopausal women whether or not they smoked but not in post-menopausal women. Based on these results, isoflavones may have beneficial effects on endothelial function, especially for younger women and women who don't smoke.

Protein dietary reference intakes may be inadequate for vegetarians if low amounts of animal protein are consumed. Kniskern MA, Johnston CS. *Nutrition*. 2010. Epub ahead of print.

Although it is recognized that non-soy plant proteins are digested at a lower rate than animal proteins, the most recent Dietary Reference Intakes (DRI) for protein did not include an adjustment for vegetarian diets. This was based on the assumption that vegetarians get a substantial percentage of their protein from animal products like dairy and eggs. In this analysis, researchers calculated the average protein digestibility corrected amino acid score (PDCAAS) for diets of 21 female subjects, based on 4-day food records. This scoring method accounts for protein digestibility and essential amino acid pattern of foods. They found that the average PDCAAS for the sample was 80% with 34% of protein deriving from grains. Based on this analysis, the authors suggested that protein requirements for some vegetarians may be 20% higher than the current DRI.

Past Issues of Vegetarian Nutrition Update newsletter can be accessed at the Member Only Section of our website
www.vndpg.org

Have You Read?

Compiled by Virginia Messina, MPH, RD

Bone Health

Adverse interaction of low-calcium diet and low 25(OH)D levels on lumbar spine mineralization in late-pubertal girls. Esterle L, Nguyen M, Walrant-Debray O, et al. *J Bone Miner Res.* 2010;25(11):2392-8.

Protein intake, weight loss, and bone mineral density in postmenopausal women. Campbell WW, Tang M. *J Gerontol A Biol Sci Med Sci.* 2010;65(10):1115-22.

Recalculation of the calcium requirement of adult men. Nordin BE, Morris HA. *Am J Clin Nutr.* 2011;93(2):442-5.

A diet high in meat protein and potential renal acid load increases fractional calcium absorption and urinary calcium excretion without affecting markers of bone resorption or formation in postmenopausal women. Cao JJ, Johnson LK, Hunt JR. *J Nutr.* 2011;141(3):391-7.

Cardiovascular Disease

Dose-response effects of omega-3 fatty acids on triglycerides, inflammation, and endothelial function in healthy persons with moderate hypertriglyceridemia. Skulas-Ray AC, Kris-Etherton PM, Harris WS, et al. *Am J Clin Nutr.* 2011;93(2):243-52.

Mediterranean diet reduces endothelial damage and improves the regenerative capacity of endothelium. Marin C, Ramirez R, Delgado-Lista J, et al. *Am J Clin Nutr.* 2011;93(2):267-74.

Anti-inflammatory effects of the Mediterranean diet: the experience of the PREDIMED study. Estruch R. *Proc Nutr Soc.* 2010;69(3):333-40.

Efficacy of high-fiber diets in the management of type 2 diabetes mellitus. Wolfram T, Ismail-Beigi F. *Endocr Pract.* 2011;17(1):132-42.

Dietary cholesterol and egg yolks: not for patients at risk of vascular disease. Spence JD, Jenkins DJ, Davignon J. *Can J Cardiol.* 2010;26(9):e336-9.

Diabetes

Effects of dietary fiber and low glycemic index diet on glucose control in subjects with type 2 diabetes mellitus. Bajorek SA, Morello CM. *Ann Pharmacother.* 2010;44(11):1786-92.

Obesity, the metabolic syndrome, and type 2 diabetes in developing countries: role of dietary fats and oils. Misra A, Singhal N, Khurana L. *J Am Coll Nutr.* 2010;29(3 Suppl):289S-301S.

Diet and Cancer

Consumption of animal products, olive oil and dietary fat and results from the Belgian case-control study on bladder cancer risk. Brinkman MT, Buntinx F, Kellen E, et al. *Eur J Cancer.* 2011;47(3):436-42.

A diverse vegetable diet may decrease lung cancer risk for smokers. Printz C. *Cancer* 2011;117(4):658.

A randomized trial of dietary intervention for breast cancer prevention. Martin LJ, Li Q, Melnichouk O, et al. *Cancer Res.* 2011;71(1):123-33.

Healthy eating index and ovarian cancer risk. Chandran U, Bandera EV, Williams-King MG, et al. *Cancer Causes Control.* 2011;22(4):563-71.

Nutrients, food groups, dietary patterns and risk of pancreatic cancer in postmenopausal women. Inoue-Choi M, Flood A, Robien K, Anderson KE. *Cancer Epidemiol Biomarkers Prev.* 2011;20(4):711-4.

The protective effect of the Mediterranean diet: focus on cancer and cardiovascular risk. Pauwels EK. *Med Princ Pract.* 2011;20(2):103-11.

Legumes

A legume-based hypocaloric diet reduces proinflammatory status and improves metabolic features in overweight/obese subjects. Hermsdorff HH, Zulet MA, Abete I, Martinez JA. *Eur J Nutr.* 2011;50(1):61-9.

Nuts and Heart Health

Effect of moderate walnut consumption on lipid profile, arterial stiffness and platelet activation in humans. Din JN, Aftab SM, Jubba AW, et al. *Eur J Clin Nutr.* 2011;65(2):234-9.

Effects of different forms of hazelnuts on blood lipids and alpha-tocopherol concentrations in mildly hypercholesterolemic individuals. Tey SL, Brown RC, Chisholm AW, et al. *Eur J Clin Nutr.* 2011;65(1):117-24.

Public Health and Nutrition Education

Free fruit at workplace intervention increases total fruit intake: a validation study using 24 h dietary recall and urinary flavonoid excretion. Krogholm KS, Bredsdorff L, Alinia S, et al. *Eur J Clin Nutr.* 2010;64(10):1222-8.

Consumers' knowledge of healthy diets and its correlation with dietary behaviour. Dickson-Spillmann M, Siegrist M. *J Hum Nutr Diet.* 2011;24(1):54-60.

Soyfoods

Is soy consumption good or bad for the breast? Hilakivi-Clarke L, Andrade JE, Helferich W. *J Nutr.* 2010;140(12):2326S-34S.

The pros and cons of phytoestrogens. Patisaul HB, Jefferson W. *Front Neuroendocrinol.* 2010;31(4):400-19.

Clinical outcomes of a 2-y soy isoflavone supplementation in menopausal women. Steinberg FM, Murray MJ, Lewis RD, et al. *Am J Clin Nutr.* 2011;93(2):356-67.

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Have You Read?, continued from page 12

Vegetarian

Could a vegetarian diet reduce exercise-induced oxidative stress? A review of the literature. Trapp D, Knez W, Sinclair W. *J Sports Sci.* 2010;1-8.

Usefulness of vegetarian and vegan diets for treating type 2 diabetes. Trapp CB, Barnard ND. *Curr Diab Rep.* 2010;10(2):152-8.

Comparison of renal function and other health outcomes in vegetarians versus omnivores in Taiwan. Lin CK, Lin DJ, Yen CH, et al. *J Health Popul Nutr.* 2010;28(5):470-5.

Dietary purines in vegetarian meat analogues. Havlik J, Plachy V, Fernandez J, Rada V. *J Sci Food Agric.* 2010;90(14):2352-7.

The effect of alcohol, tobacco and caffeine consumption and vegetarian diet on gallstone prevalence. Walcher T, Haenle MM, Mason RA, et al. *Eur J Gastroenterol Hepatol.* 2010;22(11):1345-51.

An impact of the diet on serum fatty acid and lipid profiles in Polish vegetarian children and children with allergy. Gorczyca D, Pasciak M, Szponar B, et al. *Eur J Clin Nutr.* 2011;65(2):191-5.

Meat, morals, and masculinity. Ruby MB, Heine SJ. *Appetite* 2011;56(2):447-50.

Vegetarian compared with meat dietary protein source and phosphorus homeostasis in chronic kidney disease. Moe SM, Zidehsarai MP, Chambers MA, et al. *Clin J Am Soc Nephrol.* 2011;6: 257-264.

Taiwanese female vegetarians have lower lipoprotein-associated phospholipase A2 compared with omnivores. Chen CW, Lin CT, Lin YL, et al. *Yonsei Med J.* 2011;52(1):13-9.

Nutrition concerns and health effects of vegetarian diets. Craig WJ. *Nutr Clin Pract.* 2010;25(6):613-20.

Vegetarian supplemented low-protein diets. A safe option for pregnant CKD patients: report of 12 pregnancies in 11 patients. Piccoli GB, Attini R,

Vasario E, et al. *Nephrol Dial Transplant.* 2011;26(1):196-205.

Four therapeutic diets: adherence and acceptability. Berkow SE, Barnard N, Eckart J, Katcher H. *Can J Diet Pract Res* 2010;71(4):199-204.

Vitamin B12

Clinical presentation and metabolic consequences in 40 breastfed infants with nutritional vitamin B12 deficiency—what have we learned? Honzik T, Adamovicova M, Smolka V, et al. *Eur J Paediatr Neurol* 2010;14(6):488-95.

Oral vitamin B12 for patients suspected of subtle cobalamin deficiency: a multi-centre pragmatic randomised controlled trial. Favrat B, Vaucher P, Herzig L, et al. *BMC Fam Pract* 2011;12:2.

Introduction of a new cobalamin (vitamin B12) assay: lessons from a flawed validation study. van Rossum AP, Gunnewiek JK, Verheijen FM, et al. *Clin Chem Lab Med.* 2011;49(1):105-9.

Unexplained chronic cough and vitamin B12 deficiency. Bucca CB, Culla B, Guida G, et al. *Am J Clin Nutr.* 2011;93(3):542-8.

Vitamin D

Evaluation of ergocalciferol or cholecalciferol dosing, 1,600 IU daily or 50,000 IU monthly in older adults. Binkley N, Gemar D, Engelke J, et al. *J Clin Endocrinol Metab.* 2011;96(4):981-8.

Daily consumption of vitamin D- or vitamin D + calcium-fortified yogurt drink improved glycemic control in patients with type 2 diabetes: a randomized clinical trial. Nikooyeh B, Neyestani TR, Farvid M, et al. *Am J Clin Nutr.* 2011;93(4):764-71.

IOM endorses vitamin D, calcium only for bone health, dispels deficiency claims. Slomski A. *JAMA.* 2011;305(5):453-4, 6.

Prediabetes and prehypertension in healthy adults are associated with low vitamin D levels. Gupta AK, Brashear MM, Johnson WD. *Diabetes Care.* 2011;34(3):658-60.

Weight Control

Diet induced thermogenesis, fat oxidation and food intake following sequential meals: Influence of calcium and vitamin D. Chan She Ping-Delfos W, Soares M. *Clin Nutr.* 2011. Epub ahead of print.

Dietary saturated fat intake is negatively associated with weight maintenance among the PREMIER participants. Lin PH, Wang Y, Grambow SC, et al. *Obesity* (Silver Spring) 2011. Epub ahead of print.

Have You Moved?

If you have recently moved, changed your email, or had a change of name, please update your membership information with the American Dietetic Association (ADA) to make sure that you don't miss a single issue of Vegetarian Nutrition Update. ADA maintains our member address data so you must notify ADA directly if your information changes. You can do this by:

- **Using ADA's website (www.eatright.org/obc).** Use your member ID and Web password to view and change your Member Profile at the online Business Center.
- **Faxing changes** to 312.899.4899.
- **Mailing changes** to American Dietetic Association, Attention: Membership Team, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995.
- **Calling** the Member Service Center at 800.877.1600 from 8:00 am to 5:00 PM (CST), Monday through Friday.
- **E-mailing changes** to the ADA Membership Team at membrshp@eatright.org.

Meet Our Members

Amanda L. Sager, Capt, USAF, BSc, RD

Brenda Davis, RD is a dietitian, author, and speaker. Her website is <http://brendadavisrd.com>

Brenda, how did you become interested in plant-based nutrition?

I became interested in plant-based nutrition during high school. I was raised eating omnivorous fare although I was intrigued by the idea that one could maintain great health without contributing to the pain, suffering and death of other creatures. In university, I was drawn to information concerning plant-based nutrition, and this was reflected in my diet, although I was not completely vegetarian. The tipping point for me was an interaction with a friend back in 1989. This was someone who you would least expect to inspire this sort of shift. On a rather ordinary day, this friend called to see if he could drop by for coffee before heading out deer hunting. Although my response was positive, I immediately began trying to figure out how to make him feel as guilty as possible before he took another life. After the usual trivialities, I asked him what it was that made him want to shoot another deer. I asked him if killing made him feel like more of a man. His response was swift: "You are no better than me. Just because you don't have the guts to pull the trigger, does not mean you are not responsible for the trigger being pulled every time you buy a piece of meat. You are paying someone to do the dirty work for you; at least the deer I eat has had a life. I doubt very much you can say the same for the animals on your plate." I was silenced, because I knew deep down inside he was absolutely right. At that moment I vowed to take responsibility for the food I was purchasing, and find out about the lives of the animals I was



eating. Needless to say, I was agonized by what I discovered and vowed to remove myself from this system as far as possible.

Please tell us about your training background, and the nutrition-related jobs that you've held including your current job(s).

I went to the University of Guelph, graduating in 1982 and did an internship in Ottawa. My first job was as a public health nutritionist. When we moved to Vancouver in 1990, I went into private practice. I also taught at a college and worked at a lipid clinic. In 1994, I co-authored my first book, *Becoming Vegetarian*. I have since gone on to co-author six additional books, including *Becoming Vegan*, *Defeating*

Diabetes, *Dairy-free and Delicious*, *The New Becoming Vegetarian*, *Becoming Raw* and *The Raw Food Diet Revolution*. I also wrote a chapter in a seventh book called *The Complete Vegetarian*. In 2006, I began work on a diabetes intervention research project in the Marshall Islands. I hope to be involved as long as it continues. It looks as though we will soon be expanding into other jurisdictions. I also give lectures, both nationally and internationally and continue to work in private practice.

You have had held many professional offices and done an admirable amount of volunteer work. How did this come about? Does anything stand out as particularly meaningful to you?

It seems that there is never a shortage of volunteer work to do and opportunities seem to arise at every juncture in life. The real challenge is in balancing volunteer work and paid work. When you begin writing books, lecture

invitations follow, as do requests to become involved in non-profit organizations. In most cases, both involve considerable volunteer time. Individuals who read your books often contact you with questions, and this requires many volunteer hours as well. I am also on the board of several organizations, including two local groups – an animal rights group called TRACS and a professional health organization called Canadians for Health Action (CHAA). CHAA oversees a sizable event providing education for doctors, dietitians and other allied health professionals, and the general public. The most rewarding volunteer work for me has been my experience as chair of VN DPG, my work in the Marshall Islands, and my positions with various non-profit groups.

Meet Our Members, continued from page 14

Do you have any projects in the works you'd like readers to know about?

Yes, my writing partner, Vesanto Melina, and I will be re-writing 3 books over the next 3 years – *Becoming Vegan*, *The New Becoming Vegetarian* and *Defeating Diabetes*. We have a couple of other books up our sleeves, so writing projects seem never-ending. I am also beginning to work on a research paper for the Marshall Islands project which we hope will be published this year.

What do you like to do outside of work?

I enjoy outdoor activities such as hiking, biking, canoeing, kayaking and cross country skiing, and am involved in group fitness and yoga. I am interested in local plant identification and bird watching (although I am a beginner at both!). I love spending time with family and friends, going to performances, playing games, cooking and listening to music. I also love to travel. Although most of my travel time is associated with work, I generally try to weave in some time for adventure. For example, in 2009 when I was invited to speak in Taiwan and Hong Kong, I spent 3 weeks exploring the area.

What is one of your favorite vegan/vegetarian meals?

One meal? That is difficult. I really enjoy baked yams with spicy black bean peanut sauce and a huge kale salad. I love to eat, and to be honest, every meal feels like a fabulous meal when I am eating it! My favorites always include a huge dose of greens. I think I am addicted to greens. Salads and green wraps are great. When I go away, I go into kale withdrawal and I desperately seek out giant-sized salads in an effort to get my fix. I imagine I am in good company on this one! I adore my sprouted grain, fresh fruit breakfast with raw granola. I also absolutely love the traditional holiday meal, with home-made stuffed tofu centerpiece and all the trimmings. I also appreciate raw

meals, gourmet vegan meals and a wide variety of ethnic foods.

Do you aim to follow any particular ratio of raw to cooked foods?

Not really, although my experience in writing raw food books has certainly boosted my intake and appreciation of raw food. It is absolutely delicious. I generally eat about 2 raw meals a day. I eat higher raw in the summer than the winter, although I have no hard and fast rules on the subject.

What is your opinion of the raw food diet?

I will provide a brief answer here, but I encourage VN members to check out *Becoming Raw* (Brenda Davis and Vesanto Melina with Rynn Berry, The Book Publishing Company, 2010). It is a very thorough analysis of the raw diet and many of the claims that are commonly made within the raw vegan community. In my opinion, raw vegan diets may well provide the most effective therapeutic dietary treatments for chronic disease that exist today. The reason is that they exclude or dramatically reduce most of the dietary constituents that appear to increase disease risk – animal products, processed foods and potentially harmful by-products of high temperature cooking. Although the research to date is limited, preliminary findings are quite compelling. It is important to note, however, that the more purely raw the diet becomes, the trickier it is to achieve nutritional adequacy, particularly for protein, iron, zinc, calcium, vitamin D, vitamin B12 and iodine. This is especially true when the raw diet is mainly fruit or very high in oil and other added fats. There is no research on raw diets for children, and we do not recommend their use in this population. I think that most consumers would be well advised to increase their intake of raw food, although the ultimate goal need not be eating a completely raw diet.

What advice would you give to dietitians who would like to work in the area of vegetarian nutrition?

I would encourage dietitians to get the best qualifications they can, keep up-to-date, and always strive to be competent, passionate and balanced. We need as many experts in vegetarian and vegan nutrition out there as we can get. As our numbers increase, so will our effectiveness in facilitating a mainstream shift towards plant-based diets. Dietitians should accept the best opportunities that come their way and integrate their knowledge and interest in vegetarian nutrition into their work whenever possible. While not everyone will find work with a strict vegetarian or vegan focus (although some certainly will), most will find work that allows them and even encourages them to use their knowledge and expertise in vegetarian nutrition. Plant-based diets are being recognized as being optimal for the prevention and treatment of the vast majority of diseases that fill our doctors' offices, hospitals and graveyards. Those with special expertise in plant-based diets will play an increasingly key role in improving our current state of health.

ADA Offers CPE Opportunities

Want to learn more about cultural competence? Always been curious about sustainable food systems? Thinking about becoming more active in the public policy arena? ADA offers individual learning modules in all of these areas, and more. In addition to becoming better informed, successful completion of a module provides CPE hours. These modules can be completed at your own pace (over a 30-day period). The price for ADA members is quite reasonable, typically \$19. For information about these and other CPE opportunities see <http://www.eatright.org/Shop/Categories.aspx?id=381>.

The Vegetarian Resource Group Asks, "Do Vegetarians and Vegans Stay Vegetarian?"

Reed Mangels, PhD, RD

The Vegetarian Resource Group (VRG) presented a poster session at the American Dietetic Association Food & Nutrition Conference & Expo (FNCE) in 2010 examining retention rates among vegetarians and vegans. The purpose of the study was to examine the long-term adherence to a self-chosen vegetarian dietary pattern by adults. Additionally, we wanted to examine the influence of type of motivation for choosing a vegetarian dietary pattern on long-term adherence.

While we know that approximately 3% of the adult population consistently follows a vegetarian diet (1), we know little about long-term adherence to this diet or factors that affect retention. Although few studies have investigated the duration of vegetarian diets, those that have find that people commonly remain vegetarian for 10 or more years (2,3). Additionally, over time, many vegetarians report using fewer animal products, suggesting a move toward a vegan diet (3).

Typically, compliance with dietary modifications for treatment of chronic conditions tends to plateau, with subjects often returning to baseline behaviors within one to five years (4). We wondered if compliance rates would be higher for those choosing to follow a vegetarian diet.

A study of college students found that 62% of self-described vegetarians, most of whom were vegetarian for health-related reasons, had been vegetarian for more than 12 months. In contrast, students who said they had followed a weight loss diet were not likely to follow it for even 3 months (5). If specific characteristics of those who follow vegetarian diets for long periods of time could be identified, these results could be useful in identifying modifiable traits that could improve long-term compliance with other diets including those

for weight control, hyperlipidemia, diabetes, and hypertension.

In 2006, we included a survey in *Vegetarian Journal* and asked for responses. We distributed additional surveys at various fairs, educational settings, and meetings. We contacted survey participants three years later (by mail, telephone, or email) and resurveyed them about dietary habits and motivations using the same Vegetarian Survey that was originally used. Results of the resurvey were individually compared to the original survey to determine any changes in dietary status. Dietary status was determined based on "foods I never eat." For this study, we defined a vegetarian as someone who does not eat meat, fish, or poultry and a vegan as a vegetarian who also does not eat dairy products and eggs.

The retention survey yielded a 66% return on the survey distributed. The majority of original respondents who also completed the follow-up survey were either vegetarian or vegan at the start of the study. Of those 153 subjects who were vegetarian or vegan in the original survey, 144 (94%) were still vegetarian or vegan three years later. The main reasons subjects gave for their interest in vegetarianism at the beginning of the study were animal rights, ethics, and health. Other reasons for interest included the environment, world hunger, spirituality, taste, politics, and weight loss.

Subjects who had been vegetarian or vegan three or more years appeared to continue to be vegetarian. A variety of reasons for being vegetarian or vegan are associated with continuing to follow the chosen diet. There was no correlation between reason for being vegetarian or vegan and retention.

Although more women than men were identified as following a vegetarian or vegan diet, retention rates did not differ

by gender. In our national polls, the number of vegetarians is split almost evenly between male and females, so the gender split in this survey does not reflect our usual findings and may represent a different response rate by gender.

Our results suggest that many vegetarians will follow this diet for 25 or more years, with some movement between vegan and vegetarian diets. These results are similar to those of others who have found long-term compliance with a vegetarian diet (2,3).

Compliance with other types of diets is more mixed. Only 20% or fewer of those participating in weight-loss programs are reported to have some degree of long-term compliance (6). In contrast, more than 90% of our respondents were still vegetarian or vegan, three years later, with many reporting long-term adherence to a vegetarian or vegan diet.

We also found that a variety of motivations for vegetarianism are associated with continuing to be vegetarian. Our sample size was too small to allow for analysis of the role of dietary motivation in retention. Additional research could include an expansion of our study size as well as more detailed investigation of factors, including personality traits, which influence long-term adherence to a vegetarian diet. Research into what it is that makes vegetarians continue to be vegetarian may be valuable when deciding on techniques to promote long-term compliance with many types of diets.

References

1. Stahler C. How many vegetarians are there? *Vegetarian Journal*. 2009;XXVII(4):12-13.
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Tips on Getting Grant Money: Diving In

Galen Lewis, PhD

A wise man once said to me that a vision without resources will relegate that vision to merely being a mirage. That thought stayed with me through my professional life as I struggled to bring all the program ideas and research projects that I had in mind to fruition. Earlier in my career as a state health department employee and now as a university professor, I have become acutely aware that the key to bringing my visions beyond the thinking-about-it stage to the actually-doing-it stage was having access to money. And this usually meant beyond the usual appropriations from my employer. Operating funds normally cover the basics of running a program, not the fuel for the creative passions of innovation.

The buzz word became “extramural funding.” In other words, grants. However, the idea of submitting my ideas to strangers and possibly getting rejected was not high on my want-to-do list, but I knew that these were waters that I just needed to dive into and not just tiptoe around the edges. That being said, I am a strong proponent of harm reduction. And so, not totally throwing caution to the wind, I do what I always do: a little incubation time before that half-gainer, a little surveillance for best point of entry, and a lot of homework.

A hard dispassionate look at what I wanted to do was the first step. Was this going to be a community-based service project or a research project? It makes a difference in how you shape your proposal. Funders like to know that their dollars will produce results. So in thinking like a potential funder, my thought process went from what I proposed to do, to how long it would take to do it, to how much it would cost, to what the measurable indicators of a successful project were, and finally, answering the question “so what?” Until I was able to say those things in succinct manner, in a dinner conversation with my wife, I was not ready.

After that, there is the search for potential funders. Many of us in the health field think of the National Institutes of Health (NIH) grants as the holy grail of funding. I must concur, they are certainly a prestigious marker on anyone’s resume but applying for an NIH grant is daunting. Just go to Grants.gov and read through a few of these. An often overlooked alternative source of funding is through foundations. The trick is to match the foundation to your type of project. Once again, harm reduction. You increase your case of getting funded if the project you want to propose is congruent with the aims of the foundation. A good place to look for foundation profiles is the Foundation Center website <http://foundationcenter.org/getstarted/tutorials/gfr/>. Here, they also offer some free and very helpful online courses and tutorials.

So let’s take for example the American Dietetic Association Foundation (ADAF) (<http://www.eatright.org/Foundation/default.aspx>). As dietitians, this is probably a good place to start. Most foundations will display their mission statement. In

this case, the ADAF mission is to advance “public health and nutrition utilizing the expertise of Registered Dietitians.” Its vision is simply “We all eat right.” Reality check number one. Does the mission and vision of the foundation match yours? If yes, proceed. There is usually a link for grant funding for research on foundation pages. Click that. Note that at the bottom of the ADAF Research page, there is an announcement for the “Vegetarian Nutrition Dietetic Practice Group Research Grant.” One requirement for this grant is membership in the Vegetarian Nutrition DPG.

Before you think that you have just hit the mother lode, remember that there are over 71,000 members of the ADA. However, the good news is that there are only about 1,400 members in the Vegetarian Nutrition DPG. So while this remains a very competitive process, the harm reduction is enhanced by doing your homework and drilling down to specifics.

Having been a grant reviewer, I was constantly amazed at how many proposals were rejected simply because the writer did not follow directions. If the call for applications specifies that the proposal be written in 12-point font and be no more than five pages of double-spaced text, then comply with that. If it asks for a research question, a significance statement, a methods section and a timeline, do not make these sections hard for the reviewer to find. Use headers. I recently reviewed 68 submissions at my university. About a third of them did not follow the prescribed format. If you cannot follow a simple format, it raises doubts about your ability to manage the money that we are being asked to grant you.

Almost every grant announcement specifies the weighting of the evaluation of proposals. These are usually expressed in percentages. For the example Vegetarian Nutrition Dietetic Practice Group Research Grant, here are the weightings.

- Understanding the Research Problem - 20%,
- Appropriateness of Research Design and Method – 30%,
- Feasibility of conducting the Research – 20%,
- Appropriateness of the Budget – 10%, and
- Capability of Principal Investigator/co-investigators – 20%.

This is a strong hint on how much you should devote to each section. This proposal is limited to five pages. The highest percentage of weighting is for the Research Design and Methods section at 30%. Thirty percent times 5 pages is 1.5 pages of your five page proposal. This formula is not etched in stone, but I can guarantee you that if you spend two pages (40%) describing how you “understand” the research problem,

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Tips on Getting Grant Money, continued from page 17

you are probably doing more harm than good. Remember that you are making a case for funding and one of the best ways is to address what is important to your funder.

So there you have it; a few tips on diving into the grants game. In the past five years, I have submitted seventeen grants, including three NIH proposals. I have been awarded nine of them but none have been NIH grants. Still, I keep diving in and so far I have not hit any rocks.

Galen Louis, Ph.D. is the Director of the MPH program within the Department of Health and Nutrition Sciences at Idaho State University. Formerly, as a state health department employee, he wrote grants for and managed numerous statewide programs. As a private consultant, he facilitated strategic planning and program evaluation processes for the Centers for Disease Control and other state, national and tribal organizations. He has been successful in securing foundation, state agency and federal grants throughout his career.

Answer Key, Reader Comprehension Questions

1. d
2. b
3. b
4. b
5. d
6. a
7. c
8. b
9. a

"Do Vegetarians and Vegans Stay Vegetarian?", continued from page 16

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6. Rössner S, Hammarstrand M, Hemmingsson E, et al. Long-term weight loss and weight-loss maintenance strategies. *Obes Rev.* 2008;9:624-30.

Reed Mangels, PhD, RD is a Nutrition Advisor for the non-profit Vegetarian Resource Group

Spotlight

Sarah Ellis, MS, RD

Congratulations to VN member **Debra Petitpain, MS, RD** for being selected as one of Today's Dietitian's "Ten Dedicated Dietitians Who Are Making a Difference." See <http://www.todaysdietitian.com/newarchives/030811p32.shtml> for more information.

Catherine Conway, MS, RD, CDN, CDE and **Rita Batheja, MS, RD, CDN** attended the American Dietetic Association's (ADA) Public Policy Workshop.



Rita Batheja, MS, RD, CDN; Jeanne Blankenship, MS, RD, CLE, ADA Vice President, Policy Initiatives and Advocacy; Richard Boykin, lawyer from Barnes & Thornburg, LLP; Mary Pat Raimondi, MS, RD, ADA Vice President, Strategic Policy and Partnership.

The VN DPG State Coordinator Program promotes greater visibility of our expertise in vegetarian nutrition among dietetics professionals nationwide. This column focuses on the activities of our State Coordinators to promote vegetarian nutrition, but we would also like to know what exciting things VN members have been doing to promote vegetarian nutrition. Please contact Sarah Ellis at sellis420@gmail.com to share your activities with us.

Vegetarian Nutrition Dietetic Practice Group Research Grant 2010

Creating a Vegetarian Meat–alternative Food Composition Database: Midterm Progress Report

Mele Kealoha Fernandez, RD; C. Alan Titchenal, PhD, CNS; Maria Stewart, PhD; and Joannie Dobbs, PhD, CNS.

University of Hawaii Food Science and Human Nutrition Department

Research and Outreach Goals:

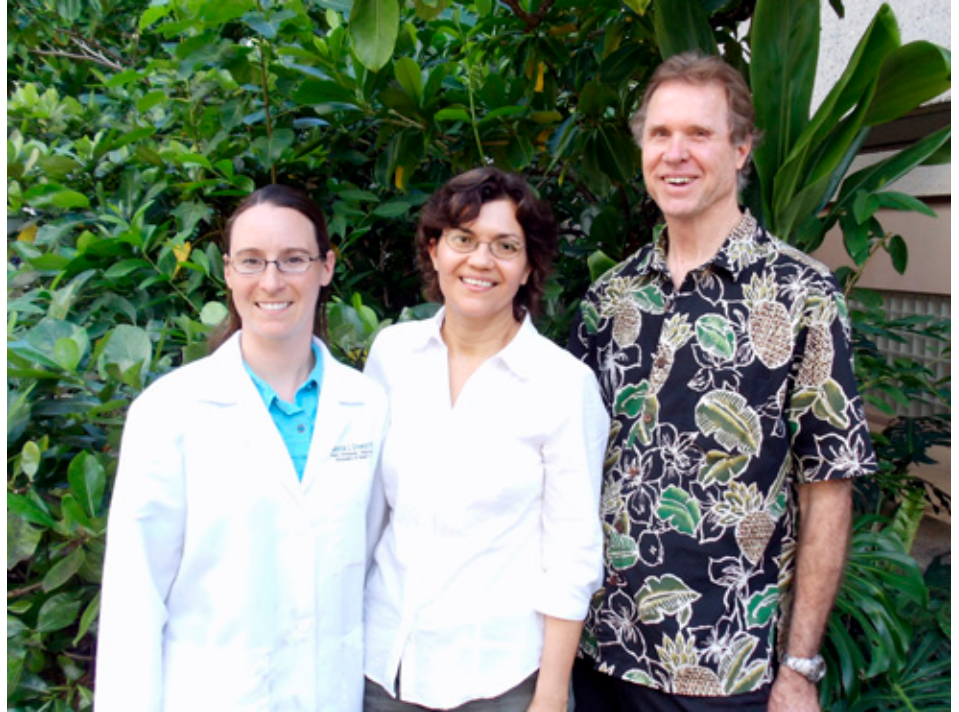
This research has been funded by the 2010 Vegetarian Nutrition Practice Group (VNDPG) Research Grant to create a Vegetarian Meat –Alternative Food Composition Database.

Forty different meat-alternative products were chemically analyzed with this VNDPG research funding. The results will be compiled to provide a practical and reliable web-based resource that will increase the ability of vegetarian consumers to make informed decisions about their food choices. This mid-term progress report provides an overview of the work completed and yet pending to satisfy the research grant requirements.

PROJECT SUMMARY

Completed Tasks:

- 1) A survey of meat-alternative products available in the six main local and national food store chains in Honolulu identified 32 companies and 245 meat-alternative products. All companies manufacturing these products have been contacted to obtain chemical nutrient analysis data or to discern how label data were derived. Label information for all 245 identified products has been transferred to a temporary database for later dispersal.
- 2) Product choice for chemically analyzed products was based on protein content as well as food forms, manufacturers, and key ingredients.
- 3) The 40 meat-alternative product sub-sample was purchased, packaging photographed for documentation, and chemical analysis begun. Analyses of moisture, lipid, fiber,



The University of Hawaii Research Team: Maria Stewart, PhD; Mele Kealoha Fernandez, RD; C. Alan Titchenal, PhD, CNS

protein (calculated from nitrogen), and minerals have been conducted.

Remaining Tasks:

- 1) Complete conversion of analytical data to edible portion Nutrition Labeling and Education Act (NLEA) reference amounts.
- 2) Purchase a subset of samples (with different lot numbers) to confirm significant discrepancies between analytical data and product label values.
- 3) Submit abstract to the American Dietetic Association's Food & Nutrition Conference & Expo (FNCE) 2011.
- 4) Contact food manufacturers (copy to the Food and Drug Administration) with nutrient results and communicate with Joanne Holden, MS, at USDA to determine the best way to incorporate this information into the USDA National Nutrient Database for Standard Reference.
- 5) Finalize and distribute the first version of the Meat-Alternative Nutrient Database.

Why ADA is Right for You: 2011 ADA Member Benefits Update

With over 71,000 members—and more joining every day—the American Dietetic Association comprises members whose needs, interests, skills, and backgrounds span the entirety of the dietetics profession. To meet the needs of a diverse and growing membership, ADA offers an ever-expanding array of member benefits designed to help you develop your skills, advance your career, and achieve your professional goals. As a member of the nation's largest organization of food and nutrition practitioners, you have access to a wide variety of benefits, including professional publications, networking opportunities, and professional development resources, to name just a few. With all of the benefits available to you, plus a steady stream of new and improved offerings on the way throughout each year, it can be hard to keep up with the full spectrum of career-enhancing benefits your membership allows you to enjoy.

Of course, ADA wants you to take full advantage of all the opportunities available to you, so this article provides a listing of some of the newer and most important resources ADA provides, accompanied by brief descriptions of their function. Please feel free to share this list with your colleagues, or direct it to someone you think may qualify for membership—we've made this article open access so non-members can see what they're missing!

NETWORKING & PROMOTION RESOURCES

E-Mentoring: Debuting this summer, ADA's new national online system will enable optimal matches between ADA member mentors and mentees based on a variety of qualifications such as geographic location, years of experience and practice area.

Member Interest Groups (MIGs): Member Interest Groups are groups of ADA members who have a common interest. Unlike dietetic practice groups

or affiliates, member interest groups focus on areas other than the practice of dietetics or geographic location. As divisions of the national organization, MIGs reflect the many characteristics of ADA's membership and the public it serves. Current MIGs include the National Organization of Men in Nutrition (NOMIN), Chinese Americans in Dietetics and Nutrition (CADN), Latinos and Hispanics in Dietetics and Nutrition (LAHIDAN), the National Organization of Blacks in Dietetics and Nutrition (NOBIDAN), Fifty-Plus in Nutrition and Dietetics (FPIND), Filipino Americans in Dietetics and Nutrition (FADN), and Muslims in Dietetics and Nutrition (MIDAN).

Find a Registered Dietitian Online Referral Service: ADA's Find a Registered Dietitian online referral service is free to Active category members representing their own private practice, group practice or employer. Consumers and businesses search this Web-based site to connect with members who provide nutrition consulting service expertise.

INFORMATION RESOURCES

www.eatright.org: ADA's website, redesigned in 2010, is faster, more user-friendly, offers a more powerful search function, and can be personalized to meet your needs. Eatright.org features five sections specifically targeted to members, students, the public, the media, and other health professionals, making it easier for all visitors to access the content they want. Build your MyADA profile and get involved with quick links to blogs, forums, surveys, and online communities—and get connected by easily subscribing to and sharing e-newsletters, RSS feeds, podcasts, and videos.

Eat Right Weekly: This weekly e-newsletter provides members with access to career resources, research briefs, continuing education opportunities, ADA updates, policy and advocacy issues, and a variety of other news.

Daily News: Opt in to receive this key resource for keeping abreast of the top news stories concerning dietetics and the profession. Delivered to your e-mail inbox every weekday morning, ADA's Daily News is a quick review of the nation's leading food, nutrition, and health headlines, with links directly to the articles.

CAREER RESOURCES

ADACareerLink: ADA's online job service allows you to post résumés, target searches by specialty and geographic location, respond directly to job listings, and receive e-mail alerts about new positions.

Center for Career Opportunities: The Center for Career Opportunities is a 1-day exhibit opportunity for FNCE exhibitors and other employers to meet face-to-face with qualified nutrition professionals who are interested in employment opportunities.

PRACTICE RESOURCES

MNT Practice Resources: There is a wealth of information on ADA's Medical Nutrition Therapy (MNT) Web page to help members understand the business of dietetics. Consider it your one-stop shop for practice management education. www.eatright.org/mnt.

Evidence-Based Nutrition Practice Guidelines and Toolkits: Located in the Evidence Analysis Library, these guidelines provide disease-specific nutrition recommendations using a systematic approach that assures nutrition care is based on scientific evidence. Toolkits accompany the guidelines and provide Medical Nutrition Therapy tools used for documenting patient encounters and collecting outcomes.

EDUCATIONAL RESOURCES

Center for Professional Development: The premier choice for lifelong learning, the Center for Professional Development offers conferences, workshops,

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Veggie Bites

Julia Driggers, RD

If you have ideas or suggestions for the Veggie Bites column, please email Julia Driggers, RD at driggers.ja@gmail.com.

New Dietary Guidelines Incorporate Vegetarian/Vegan Meal Plans

The 2010 *Dietary Guidelines for Americans* have been released. The document emphasizes three major nutrition goals:

- Balance calories with physical activity to maintain weight,
- Consume more of certain foods and nutrients such as fruits, vegetables, whole grains, fat-free and low-fat dairy products, and seafood,
- Consume fewer foods with sodium (salt), saturated fats, trans fats, cholesterol, added sugars, and refined grains.

Fortunately, the vegetarian diet is typically rich in fruits, vegetables, and whole grains, and low in saturated fats. The full document, which can be found at <http://www.health.gov/dietaryguidelines/>, specifically includes recommendations for vegetarian and vegan diets! The *Guidelines* outline suggested serving size for all food groups based on a person's caloric needs. Recommendations are provided in terms of food groups as well as specific sub-groups. For example, in the section providing a vegan adaptation of the USDA food patterns, the food group "Protein Foods" is divided into three sub-groups including beans and peas, soy products, and nuts and seeds. A meal plan for a vegan who requires 2,000 calories per day includes at least 13 oz/eq of beans and peas, 10 oz/eq of soy products and 15 oz/eq of nuts and seeds weekly. The entire list of recommendations for vegetarian and vegans can be found on pages 81 and 82 of the electronic document.

2011 ADA Member Benefits Update, continued from page 20

meetings, lectures, live phone teleseminars and webinars, e-learning, CD-ROM and online courses, and audiotapes.

Leadership Institute: ADA's Leadership Institute is an integrated, intensive, multi-format training program in the theory and practice of leadership in dietetics. The purpose of the program is to enhance the leadership competencies of ADA members both conceptually and interpersonally, through a combination of information, skill development, and practice-based educational experiences.

For a more extensive list of benefits, visit the members-only section of ADA's website at www.eatright.org or call the Member Service Center at 800/877-1600, ext 5000, Monday through Friday, 8:00 AM to 5:00 PM Central Standard Time.

Newest Dietary Reference Intakes (DRIs) Cite ADA's Position Paper on Vegetarian Diets

The recently published *Dietary Reference Intakes for Calcium and Vitamin D* includes information from the American Dietetic Association's 2009 position paper on vegetarian diets. You can read the complete text of the DRI for calcium and vitamin D at <http://www.nap.edu/> and see the position paper at <http://www.eatright.org/About/Content.aspx?id=8357>.



ADA Releases Updated Brochure on Vegetarian Diets

Eating Well the Vegetarian Way is a brochure produced by ADA that was updated in 2010. This brochure explains the different types of vegetarian diets and features tips on selecting nutrient-rich foods and on meatless meal planning. Advice on going meat-free one step at a time and stocking a kitchen makes this an excellent resource.

New Products

If peanut butter is one of your favorite staple foods, you'll should know about varieties of Peanut Butter & Co. products! Flavors include Dark Chocolate Dream® and Cinnamon Raisin Swirl®. All peanut butters are certified vegan, except The Bee's Knees® which contains honey. For more information, go to <http://ilovepeanutbutter.com/>

Nutiva's Hemp Protein Powder contains 7.5 gm protein, 60 calories, and 10% of the Daily Value of iron in 2 tablespoons. Nutiva also offers a hemp protein product with added fiber. Products can be added to smoothies, hot cereals, and other foods. Visit <http://nutiva.com/> for more information.

Vegetarian Nutrition Dietetic Practice Group Award of Excellence in Service and Leadership

Purpose: To recognize an individual who has demonstrated outstanding leadership and service within the VN DPG and who made exceptional contributions towards the promotion of vegetarian nutrition.

Criteria:

1. Successful candidate must have been a member of the VN DPG for at least 3 years. Executive Committee members are ineligible.
2. The nominee must demonstrate outstanding service and leadership within VN DPG, serving as an officer, editor, state coordinator or committee chair.
3. The nominee must demonstrate exemplary dedication to vegetarian nutrition and dietetics through professional and/or public presentations, media work, publications, research, public policy work, innovative educational programs and/or leadership in related national and state organizations.

Nominating procedure:

1. Submissions must be received by September 1 of each year.
2. Any VN DPG member may submit nominations.
3. Submissions should be sent to current-year Chair (see address below).
4. Nominations should include the following:
 - Name and contact information.
 - A brief summary of why you believe this nominee deserves this award.
 - One to three letters of support for the nominee's work in vegetarian nutrition and dietetics.

Award: One award of \$500.

Notification of award: The recipient of the award will be notified by e-mail, telephone or mail within a week of the selection and the presentation of the award will be made at the ADA Food & Nutrition Conference & Expo (FNCE) (award will be mailed if winner does not attend the conference or arrangements made to present at local event for the winner).

Sponsor: Vegetarian Nutrition Dietetic Practice Group.

Note: The award winner will be determined by a vote of the Executive Committee.

Please send nominations to: Matt Ruscigno, 951 N. Oxford Ave., Los Angeles, CA 90029; mattruscigno@gmail.com.

www.vndpg.org

Cyndi Reeser Outstanding State Coordinator of the Year Award

Purpose: To recognize an individual who has demonstrated outstanding leadership and service as a state coordinator for the VN DPG and who has made exceptional contributions towards the promotion of vegetarian nutrition throughout the year (June 1 through May 30).

Criteria:

1. The successful candidate must be a VN DPG member in good standing.
2. The nominee must demonstrate outstanding service and leadership as State Coordinator and exemplary dedication to vegetarian dietetics in a variety of ways. For example:
 - Networking with and providing guidance to members in their state.
 - Promoting the VN DPG by exhibiting and/or providing presentations at state and/or local dietetic association meetings.
 - Speaking to the media about the VN DPG locally or statewide.
 - Organizing professional discussion groups and/or journal clubs for members at a local and/or state level.
 - Providing innovative education in vegetarian nutrition to professionals and the general public.
 - Being active in the general promotion of sound vegetarian/vegan diets through research, publications, public policy work and/or involvement in related national, state and local organizations.

Nominating procedure:

1. Nominations must be received by September 1 of each year.
2. Submissions are to be sent to the State Coordinator Chair (see address below).
3. Submissions should include the following:
 - Name and contact information.
 - A letter of justification for the nomination, including a description of activities, presentations and exhibits conducted as State Coordinator, with an assessment of how these contributed to the award criteria listed above, such as the number of VN DPG and non VN DPG members contacted and related outcomes.

Award: One award of \$250.

Notification of award: The recipient of the award will be notified by e-mail, telephone or mail within a week of the selection and the presentation of the award will be made at

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Awards, continued from page 22

the ADA Food & Nutrition Conference & Expo (FNCE) (award will be mailed if winner does not attend the conference or arrangements made to present at local event for the winner).

Sponsor: Vegetarian Nutrition Dietetic Practice Group.

Note: The award winner will be determined by a vote of the Executive Committee.

Please send nominations to: Sarah Ellis, 2267 Allegheny Way, San Mateo, CA 94402; sellis420@gmail.com.

2011-2012 VN DPG Speaker Stipend Awards

PURPOSE: The Speaker Stipend Award is a member benefit for VN DPG members to support vegetarian educational speaking events at state and/or local dietetic association meetings. Five (5) stipends, each up to \$1,000 will be available for VN DPG members who make oral presentations.

ELIGIBILITY: Programs must be sponsored by a state or local dietetic association. The program must be on a

vegetarian-related topic. Sponsored speakers must have been a VN DPG member for the past two years by the date of the speaking event.

TO APPLY: Submit a completed Speaker Stipend Award Application (available on the Members Only section of the VN DPG website, www.vndpg.org) to the State Coordinator Chair (Sarah Ellis, sellis420@gmail.com.)

Applications are due by September 1, 2011 for events taking place between January 1 and May 31, 2012 and by March 1, 2012 for events taking place between June 1 and December 31, 2012.

REQUIREMENTS FOR AWARDEES: Notify the State Coordinator Chair of the name, address and social security number of the individual to receive the award check. Acknowledge the VN DPG in the event brochures, advertisement, and program booklet. After the program, award payment will be sent once submission of the following information is received by the State Coordinator Chair:

- a short summary of the event, including attendance
- evaluation of the supported speaker, and
- the actual expenses incurred by the speaker.



*Sylvia A. Escott-Stump, MA, RD, LDN
ADA President, 2011-2012*

Come Join me at FNCE!

You're invited to attend the 2011 ADA Food & Nutrition Conference & Expo, September 24 – 27 in San Diego, California. Don't miss this chance to truly IMPACT your career by earning CPEs, making key business connections and discovering emerging trends and innovations.

I look forward to seeing you in San Diego!

Here is a preview of what to expect:

- Enhance your learning with cutting-edge educational sessions covering at least eight tracks allowing you to earn a MINIMUM of 20 CPE hours.
- Make plans to attend the Research Symposium on Monday where you will gain an insight into the research and strategic topics related to the dietetics profession.
- Discover new and emerging trends and innovations while walking the Expo floor and meeting with over 300 exhibitors.
- Attend the Culture Symposium on Tuesday where you will be able to expand your cultural horizons.
- Be amazed and inspired by our line-up of key note sessions on the power of volunteerism, passion for a cause and how to achieve personal and professional success.
- Above all, network with over 6,000 of your peers!

Visit www.eatright.org/fnce to learn more. Registration opens May 16, 2011

eatright American Dietetic Association

IMPACT

ADA FOOD & NUTRITION CONFERENCE & EXPO

SEPTEMBER 24–27, 2011 | SAN DIEGO CONVENTION CENTER | SAN DIEGO, CA



www.vndpg.org

Publish Your Work in the Vegetarian Nutrition Update

Are you interested in writing articles for the newsletter? VN DPG needs authors to provide articles for the upcoming year. If you are interested in writing an article, please contact Reed Mangels, Editor, with your idea at reedmangels@comcast.net.

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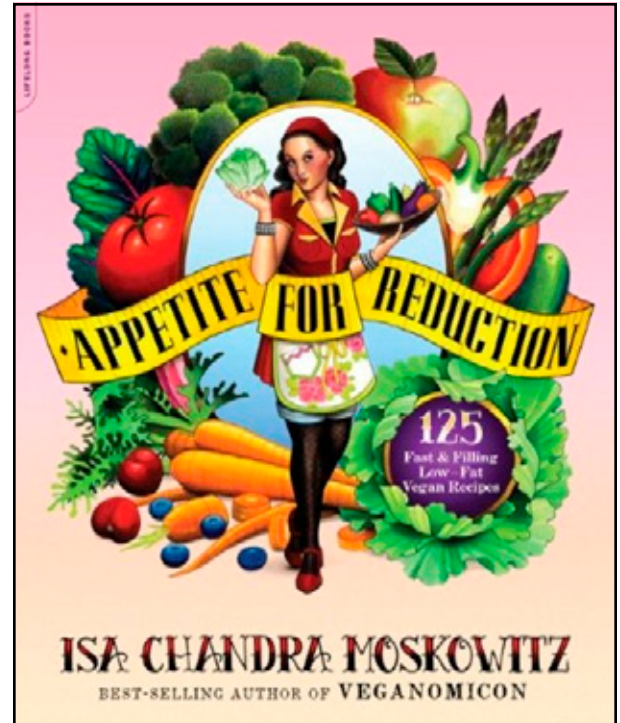
If you are not already signed up for VN's electronic mailing list, sign up today and join the many members who are already a part of this lively list. This VN DPG Yahoo! Group is an exclusive member benefit and a great way to connect with other RDs interested in plant-based diets. Whether you're a seasoned vegetarian yourself or just want to learn more about vegetarian nutrition, we welcome your participation. Sign up today and post questions, announcements, links, and anything relating to vegetarian nutrition. Just go to <http://health.groups.yahoo.com/group/vndpg>, and click on "Join this group." Be sure to include your full name and ADA number. For questions, contact Liz Adams, Electronic Mail List Coordinator at emaliz1021@sbcglobal.net.

Bookshelf

Appetite for Reduction

by Isa Chandra Moskowitz with Matt Ruscigno, MPH, RD. Da Capo Press, 2011; 290 pages; \$19.95; ISBN 978-1-60094-049-1

Isa Chandra Moskowitz is a vegan chef and author of several best-selling cookbooks, such as *Veganomicon*. She has been featured in the *New York Times*, the *Washington Post*, *Herbivore*, and other publications as well as appearing on National Public Radio (NPR). She has also been diagnosed with polycystic ovary syndrome (PCOS) and hypothyroidism, and states that she wrote *Appetite for Reduction* for herself, as well as for everyone who is looking for healthy, quick and filling vegan recipes.



Matt Ruscigno received his Master's Degree in Public Health from Loma Linda University. He is a registered dietitian, teaches at a community college in South Central Los Angeles, advises vegan athletes on how to maximize their performance during training and competition, and teaches low-income students about nutrition with the Network for a Healthy California.

Appetite for Reduction includes information on vegan nutrition highlighting nutrients that are most often asked about in vegan diets (such as iron, calcium, zinc, and vitamin B12). This nutrition section is followed by nine chapters that include 125 low-fat vegan recipes for salads, sides, veggies, beans (as main dishes), tofu and tempeh, pasta, soups, and "comfort" curries/chili/stews. Each recipe includes nutritional information; some recipes include specific tips and notes. The author also uses icons to denote items that are gluten-free, soy-free, require 30 minutes or less to prepare, or include downtime (such as leaving to bake or boil). The book ends with a section on "bowls" and "sandwiches," and tips for how to use these without getting stuck in a rut.

The recipes in this book are very easy to follow and very tasty. I liked the way that Moskowitz includes tips and notes on what to expect. Detailed descriptions of all the tasks related to a particular dish are helpful. Moskowitz' style of writing makes you feel as if she is in your kitchen talking you through the cooking process! Overall, I highly recommend this book to everyone who wants to expand their vegan recipe collection, particularly making use of low-fat recipes.

Reviewed by Christine E. Marquette, RD, LD, CLT, ACSM Certified Health Fitness Specialist

Executive Committee and VN DPG Officers 2010-2011

CHAIR*

Debbie Lucas, MS, RD, CDE
dsl-rd@hughes.net

CHAIR ELECT*

Matt Ruscigno, MPH, RD
mattruscigno@gmail.com

PAST CHAIR*

Janet Lacey, DrPH, RD, LDN
jlacey@wcupa.edu

TREASURER*

Martha deCampos, RD, LD
ma_decamp@hotmail.com

SECRETARY*

Diana K Cullum-Dugan, RD, LDN
dianacullumdugan@gmail.com

MEMBERSHIP CHAIR

Meredith Hink, MS, RD, CD
zondagmd@hotmail.com

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Linda L Rankin, PhD, RD, LD, FADA
ranklind@isu.edu

PUBLIC POLICY CHAIR

Catherine Conway, MS, RD, CDN, CDE
catherineconway@msn.com

NOMINATING COMMITTEE CHAIR

Marty Davey, MS, RD
Marty_davey@yahoo.com

NOMINATING COMMITTEE

Amy Rose Sager, RD, LDN, CLT
steppingtowellness@gmail.com

Debra Petitpain, MS, RD, LD
petitpa@musc.edu

Janet Lacey, DrPH, RD
jlacey@wcupa.edu

NETWORK REP TO VRG

Reed Mangels, PhD, RD, LDN
reedmangels@comcast.net

NETWORK REP TO SDADA

Evelyn Kissenger, MS, RD
evelynk@andrews.edu

NEWSLETTER EDITOR

Reed Mangels, PhD, RD, LDN
reedmangels@comcast.net

NEWSLETTER STAFF

Julia Driggers, RD
driggers.ja@gmail.com

Sarah Ellis, MS, RD
Sellis420@gmail.com

Christine E. Marquette, RD, LD, CLT
chris@marquettenutrition.com

Virginia Messina, MPH, RD
messina@olympus.net

Monique Richard
mmr2v@mtmail.mtsu.edu

Amanda Sager, RD
amanda.sager@afghan.swa.army.mil

Jay Sutcliffe, PhD, RD
jsutcliffe@csc.edu

ELECTRONIC MAIL LIST COORDINATOR

Liz Adams
emaliz1021@sbcglobal.net

VN EVIDENCE ANALYSIS WORK GROUP CHAIR

Sudha Raj, PhD, RD
Sraj@syr.edu

HOUSE DELEGATE

Eleanor Pella, MS, RD, LDN
Eleanor@letstalkfood.us

WEBSITE EDITOR

Debbie King, MS, RD, LD
dlkingrd@gmail.com

WEBSITE MANAGER

Paul Whitener Jr.
paul@fontsnob.com

DPG RELATIONS MANAGER

Kerry Regnier, MPH, RD, LDN
kregnier@eatright.org

VN DPG State Coordinators

Chair State Coordinator Program

Sarah Ellis, MS, RD
Sellis420@gmail.com

California

Jill Nussinow, MS, RD
jill@vegetarianconnection.com

Matt Ruscigno, MPH, RD
mattruscigno@gmail.com

Colorado

Eric Stein, MS, RD
Estein@wellnesschef.com

Florida

Barbara Kamp, MS, RD
barbarakamp@gmail.com

Illinois

Carolyn Tampe, MS, RD, LDN
ctampe@gmail.com

Kentucky

Cynthia Chandler, MS, RD
CChandler@sullivan.edu

Louisiana

Steve Roch, RD, LDN, CFT
SteveRochrd@yahoo.com

Maryland

Mark Rifkin, MS, RD, LDN
Preventive_nutrition@verizon.net

Massachusetts

Amy Rose Sager, RD, LDN, CLT
steppingtowellness@gmail.com

Minnesota

Suzy Sorenson, RD, LD, CDE
Suzanne.Sorenson@childrensmn.org

Missouri

Laura Poe
peacebypastries@gmail.com

New England States (Vermont, New Hampshire, Maine)

Gita Patel, MS, RD, CDE, LD
gita@feedinghealth.com

New York

Rita Batheja, MS, RD, CDN
krbat1@juno.com

Ohio

Christopher Stocking
Christopher.Stocking@gmail.com

Tennessee

Jan Estelle, RD, LDN
jestelle@gmail.com

Texas

Debbie King, MS, RD, LD
dlkingrd@gmail.com

* Executive Committee and Voting Members