Clinical Corner: Cardioprotective Effects of a Plant-Based Diet in Chronic Kidney Disease

By Lauren Graf, MS, RD

Traditional nutrition recommendations for patients with chronic kidney disease (CKD) discouraged plant-based diets because they were perceived to be excessive in potassium and phosphorus and low in quality protein. Instead, refined carbohydrates and animal protein were recommended. The primary nutrition goals focused on management of potassium and phosphorus as well as the importance of adequate protein. Little emphasis was placed on the healthfulness of the diet as a whole or how nutrition influences cardiovascular disease (CVD).

CVD is the leading cause of death in children and adults with advanced kidney disease [1]. This is largely due to inflammation and disturbances in calcium-phosphorus balance. A large body of evidence over the past decade has led to a paradigm shift in the way nutrition in renal disease is viewed. It is now recognized that nutrition is extremely important in modulating inflammation, phosphorus balance, and the gut microbiome, all of which play a major role in preventing CVD.

Fiber: The Overlooked Nutrient

It is well documented that a whole food, plant-based diet, low in sugar, dramatically reduces risk of CVD and in many cases is an effective way to reverse it [2]. Recent studies suggest that a high fiber diet is even more effective in reducing inflammation and mortality in those with CKD than in the general population [3]. Higher fiber intake in CKD patients is associated with significantly lower levels of the inflammatory marker C-reactive protein (CRP). The more fiber, fruit and vegetables CKD patients consume, the lower the risk of mortality [3, 4].

A high fiber diet has also been shown to favor growth of beneficial bacteria in the gut that have protective effects on the heart and vascular system [5]. Fiber intake results in short-chain fatty acid production by microbes in the gut, which inhibits cholesterol production by the liver and increases cholesterol-binding bile acids; this aids in the elimination of lipids. Short-chain fatty acids also improve insulin sensitivity and suppress uremic toxins.

Plant-Based Diets and Phosphorus

Phosphorus management is crucial for patients with CKD to prevent heart and blood vessel calcifications. Plant-based diets are more effective in controlling serum phosphorus compared with animal protein-based diets [6]. Plants naturally contain phytate, the storage form of phosphorus, which is not digestible by humans. Therefore, much of the phosphorus from plant foods passes through undigested. It is important to take into account the source (plant, meat, processed food) rather than simply the amount of phosphorus [6-8]. See Table 1 for absorption rates of various phosphorus sources.

Table 1: Sources of Phosphorus and Absorption Rates

<table>
<thead>
<tr>
<th>Source of Phosphorus</th>
<th>Gastrointestinal Absorption (%)</th>
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<tbody>
<tr>
<td>Animal Protein</td>
<td></td>
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<tr>
<td>Cheese, milk, yogurt, beef, turkey, chicken, fish, egg</td>
<td>40-60</td>
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<tr>
<td>Vegetarian Protein</td>
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<tr>
<td>Whole grains, nuts, seeds, beans, vegetables, chocolate</td>
<td>10-30</td>
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<tr>
<td>Food Additives and Preservatives</td>
<td>Some processed food and beverages</td>
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Phosphate additives in processed food are highly absorbable and are the largest obstacle to achieving serum phosphorus control. Over the past two decades, phosphate preservatives in the Western diet have risen dramatically and now contribute as much as 1,000 mg per day. In the US, phosphate salts are allowed to be injected into meat and poultry to improve flavor and extend shelf life, which can increase phosphorus amount by as much as 70% [9]. While food companies are not legally required to report the quantity of phosphorus on the nutrition facts section of the label, they are mandated to report the presence of phosphate additives in the ingredient list. See Table 2 for a list of common additives.

Table 2: Common Phosphate Additives

<table>
<thead>
<tr>
<th>Phosphate Additives</th>
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<tr>
<td>Phosphoric acid</td>
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<td>Pyrophosphates</td>
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<tr>
<td>Polyphosphates</td>
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<tr>
<td>Hexametaphosphate</td>
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<tr>
<td>Dicalcium phosphate</td>
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<td>Disodium phosphate</td>
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<tr>
<td>Sodium polyposphate</td>
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Tips for Counseling Patients with CKD

Focus primarily on whole foods, rather than individual nutrients. Nutrients are not eaten in isolation; rather, they are consumed as part of whole food with an array of nutrients and antioxidants that act synergistically. Given the health benefits and low phosphorus bioavailability of high fiber, plant-based foods, it is not advisable to restrict them in the diet. The emphasis should instead be on limiting processed food with phosphate additives, and animal protein.

- Encourage consumption of low potassium vegetables and fruit with every meal.
- Encourage unrefined whole grains such as brown rice, barley and oats, nuts and seeds.
- Be cautious with boxed cereal, crackers and faux meat as they often contain significant amounts of phosphates.
- Beans, legumes, tofu, tempeh and eggs are good sources of protein. Servings of beans may need to be limited in some patients due to the high potassium content.
- Carefully read ingredient lists on packaged food and avoid/limit products with phosphate additives.
- Avoid or limit cow’s milk and cheese to 1 serving daily. Plant-based milk such as almond milk can be a good substitution. Choose a brand that does not contain phosphates.

References:


Lauren Graf, MS, RD has been working with children and young adults with all stages of kidney disease at Montefiore Medical Center in the Bronx, NY for nine years. She is also the nutritionist for the Montefiore-Einstein Cardiac Wellness Program, where she instructs patients on how to adopt a plant-based diet to prevent and reverse heart disease. She has written for a variety of academic and professional publications and has been quoted in numerous publications for the lay public. She can be followed on Twitter at @NephpNutrition.

www.vndpg.org
Supplement Savvy for the Vegetarian or Vegan

By Ginger Hultin, MS, RD, LDN

While dietitians know that, whenever possible, nutrients should come from natural sources in fresh food, clients often look to our expertise regarding appropriate supplementation. Fresh fruits, vegetables, legumes and whole grains contain vitamins, minerals, fiber and antioxidants bound in a food-matrix not found in supplements, yet there are some good reasons that people turn to supplementation for health. Clients may choose to take supplements for varying reasons such as: certain chronic conditions and disease states, concern about food quality and potential lack of nutrients in the modern diet, deficits identified by lab results such as low vitamin D concentrations or chronic inflammation, but they are often not well informed about the safety or efficacy of these products. For vegetarians or vegans, supplementing can be more difficult due to sourcing of raw products and capsules. Many supplements have ingredients derived from animal products that would not be appropriate for a vegetarian or vegan. Dietitians are the experts in nutrition and should be the public’s first source regarding supplementation per the Academy’s 2009 position paper (1). Dietitians need to be ready to answer questions regarding supplements that are appropriate and safe for vegetarians and vegans.

Aside from raw products in supplements that may be derived from animal sources, supplement encapsulations can pose a problem for vegetarians due to animal-derived gelatin. Gelatin is a cheap and common component of capsules for supplements and is composed of collagen or by-products derived from boiled skin, bones, ligaments and tendons of animals. New technology utilizing plant sources such as seaweed, soy, cellulose or starch-based ingredients now offer an alternative for those avoiding animal products. With the use of plant-based capsules instead of animal-sourced gelatin, these products will often be labeled specifically “Vegetarian,” “Vegan,” “Halal” and/or “Kosher.” Halal products are food or drink that have followed processing rules under Islamic law to ensure their quality and appropriateness to consume. Kosher foods are those that conform to the regulations of Jewish dietary laws.

In addition to capsules and gel caps, excipient ingredients can also pose a problem for vegetarians and vegans. Many supplements are bound with lactose, a milk derivative that would be unacceptable for a vegan diet or those with lactose intolerance. Lactose is used in supplements due to the fact that it is water soluble for absorption, chemically stable, non-toxic and provides a mildly sweet flavor. Lactose can be used as a filler for chewable or disintegrating tabs (2). Look for supplements labeled “Lactose-free” or “Vegan” to avoid this very common additive.

For all supplements, it is important to read the fine print on the label. Vegans will need to avoid products with lactose, whey, rennet or casein which are dairy-derived products. Be sure that magnesium stearate is labeled as Vegetable magnesium stearate to avoid a product derived from animal fat. Magnesium stearate (both animal and vegetable sources) is used to prevent capsules from sticking to machinery during processing. For vegans, check labels for the words bee pollen, propolis (plant resin that bees collect to seal the hive), royal jelly (bee gland secretion used to feed larvae), honey or beeswax to avoid bee-related products. Check products that contain albumin which is derived from eggs or lecithin, which can be derived from egg or plants.

Below are some supplements commonly derived from or containing animal products that should be considered when choosing a vegetarian or vegan product. Keep these specific supplements in mind when choosing plant-based dietary support. Calcium, essential fatty acids, probiotics, protein powder, vitamins B12 and D are supplements commonly used by vegetarians and vegans that may pose questions regarding ingredients that are not animal-based. Pay close attention to labels on individual products. Be aware that these are not recommendations for products that need to be supplemented in a vegetarian or vegan diet; rather they are supplements commonly used by the typical vegetarian or vegan client a dietitian may see that may be derived from animal sources.

Calcium
Non-vegetan calcium is often sourced from egg and oyster shells or animal bone meal raw products; for a vegetarian or vegan, look for a coral- or algae-based product instead. The RDA for calcium is 1,000 mg for females up to 50 years old and males up to age 70, and 1,200 mg for females over 51 and all adults age 71 or older (3). For the vegetarian/vegan, calcium needs can be met through foods such as fortified plant milks and tofu, green leafy vegetables, legumes, and almonds. Many companies carry vegan products including calcium and other bone support blends.

Omega-3 Fatty Acids
Omega-3 fatty acid supplements, eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), commonly contain fish or krill, and are, therefore, inappropriate for plant-based clients. Instead, vegetarians and vegans can choose a microalgae source of omega-3 fatty acids. Keep in mind that alpha-linolenic acid (ALA), found readily in the diet in some vegetable oils, walnuts, flax, hemp and chia seeds, can be converted to EPA and DHA in the body at varying levels (4). For direct supplementation of EPA/DHA, try a vegan microalgae source if your client avoids seafood and animal products.
Probiotics
Healthy, live bacteria are sometimes sourced from dairy and will need to be replaced with fermented soy products, vegetables or tea for vegetarians who do not consume dairy or for vegans. Some vegetarians and vegans choose to avoid any product with the lactobacillus strain, instead opting for products with other varieties that are labeled “from non-dairy sources”. Several companies make vegan probiotics. For naturally occurring probiotics from non-dairy sources, add sauerkraut or kimchi, kombucha tea, miso, or tempeh into your diet.

Protein
Protein powder is another common supplement vegetarians and vegans may use, though sources of protein in the natural diet are plentiful (5). Dietitians can counsel patients to read labels in an effort to avoid dairy products such as whey or casein, bee products such as propolis, or animal products like beef protein. Be sure that any branched-chain amino acids (BCAA) are derived from plant sources instead of animal. Look for products with pea, quinoa, brown rice, hemp, or other non-animal sources instead. Remember that plant-based diets contain enough protein if including nuts and seeds, legumes, lentils, soy products, whole grains and vegetables.

Vitamin B12
Vitamin B12 is found specifically in animal products like meat, fish, poultry, eggs, or milk/dairy products and is a common vitamin supplemented in a vegan diet where these foods are strictly avoided. B12 for vegans will often be sourced from a bacterial host; look for this supplement in the form of cyanocobalamin instead of methylcobalamin. Many vegan foods are fortified with B12 such as non-dairy milks, meat substitutes, some breakfast cereals, and Red Star® Vegetarian Support formula nutritional yeast.

Vitamin D
The active form of vitamin D commonly used for supplementation, D3 or cholecalciferol, is often derived from lanolin in sheep’s wool or fish oil. Vegetarians and vegans can purchase vitamin D3 from a non-animal source. VitaminD2 or ergocalciferol is more commonly from a plant-based source.

When counseling clients on a healthy vegetarian or vegan diet, you may encounter questions about supplementation. By familiarizing yourself with appropriate plant-based sources, you can better position yourself as an expert in individualized nutrition and supplementation advice for those who avoid animal products. Keeping in mind that the Academy’s position is that a varied diet of unprocessed foods can provide adequate nutrients (1), supplementation can be used safely and appropriately to fill dietary gaps or for certain at-risk populations.

References:

Ginger Hultin is a freelance writer and clinical dietitian at the Block Center for Integrative Cancer Care in Chicago, Illinois. She is the current President of the Chicago Academy of Nutrition and Dietetics and Past State of Illinois Coordinator for the Vegetarian Nutrition DPG. Ginger specializes in integrative oncology, plant-based nutrition, fitness, weight management, and has a passion for cooking and social media.
From the Editor

Debbie Lucus, MS, RD, CDE

It is hard to believe that a year has gone by since I began the transition to the editor position for the Vegetarian Nutrition Update. With a steep learning curve, and excellent support and guidance from the past and present editorial staff, I feel more comfortable every day.

There are many volunteers who work behind the scenes to help the newsletter come together and I would like to offer them my appreciation. Assistant Editor, Hollie Gelberg, works tirelessly to coordinate the many columns and authors. The columnists provide new information every issue to enlighten and entertain us. I can’t even imagine the time it must take Virginia Messina to put together the latest research for us in the Have You Read? and What’s New in Research? columns. The review committee gives insightful feedback and corrections when I no longer can tell commas from semi-colons. I am so grateful to the knowledgeable authors who share the most up-to-date information in their articles -- I am constantly learning as I am editing. Thank you also to past editor, Reed Mangels, who continues on the review committee and provided a great article in this issue on how upcoming dietitians are receiving their vegetarian nutrition education.

I hope you enjoy this issue with its varied topics by our talented members. If you have an idea for an article or would like to provide feedback, please reach out to me at: dlucusrd@gmail.com

Congratulations
to the newly elected VN Board members taking office June 1, 2015:

Chair-elect: Ginger Hultin
Treasurer: Debbie Petitpain
Nominating committee: Anya Todd
Gadgets for Gratifying Vittles

By Diana Cullum-Dugan, RD, LD, CYT

Have you noticed that many Millennials, young adults who were born between 1978 and approximately 2000, do not cook? Come to think of it, neither do many of their parents, the Baby Boomers born between 1946 and 1964. Perhaps it’s due to the rise of our fast food nation during the Gen X era when stay-at-home moms entered the workforce and the attraction to newly created convenience foods and frozen TV dinners grew. A common obstacle to making behavioral change stick in light of fast-paced lifestyles is the lure of eating out or ordering home delivery. It seems easier and faster and take-out tastes great to many.

Registered Dietitian Nutritionists (RDNs) guide clients to create a solid plant-based foundation for meals and snacks as an optimal approach for any nutrition concern. The Scientific Report of the 2015 Dietary Guidelines Advisory Committee support the concept of eating more plants and less meat. That said, a potentially foreign concept known as ‘food and meal preparation’ poses a challenge. Menu planning, grocery shopping and preparing nutritious meals takes work and skills many clients don’t possess. How can RDNs complement their teachings with cooking tips so clients feel empowered to start off with simple methods in the kitchen? Check out these fun gadgets easily found on the Internet or in kitchen stores that take the sting out of cooking.

A veggie spiralizer looks like an hourglass with blades and turns ordinary vegetables into tantalizing spirals. Eating zucchini and carrots just became easy and fun. It’s perfect for those who limit wheat-based pasta or want more zippy taste in their meals. Try zucchini spirals raw, boiled or sautéed and topped with vegan pesto (recipe below) for a delicious, nutritious and fast meal.

A mandolin is a chef’s prized tool yet is easy enough for amateurs to use to craft interesting shapes out of vegetables and fruits. This tool creates uniform sizes whether you cut, slice, grate, waffle cut or julienne vegetables for provocative dishes like scalloped potatoes, carrot jicama slaw or cucumber salad.

While shapely vegetables may entice you into eating more of them, the mandolin comes with a cutting hazard. It’s best used with a cut-resistant glove for safety. The glove is also supreme protection when using a grater and sharp knives.

Any season is perfect for batch cooking, a lifesaver for those who hate to cook or have limited kitchen time. Use a vacuum sealing system to preserve extra chili, soups, and casseroles, and freshly harvested garden vegetables, and freeze for those late night dinners after work or hitting the gym. Its vacuum-sealed system keeps food fresh and minimizes bacterial contamination. Also, frozen meals store more easily in the freezer because of their uniform size.

Consumers share a concern that plastic containers may contain an industrial chemical known as Bisphenol A (BPA). BPA could compromise your health, especially for infants, although manufacturers no longer use BPA in baby bottles or sippy cups. If you’re concerned, throw back to the Baby Boomers era and use glass containers for storage that come with plastic or silicone lids suitable for freezing, refrigerating, or microwaving.

Pop a little pizzazz into potatoes with a ricer. It’s easier to use and less expensive than a food processor. Shaped like a gigantic garlic press, it makes fluffy mashed potatoes, parsnips, carrots, turnips, rutabaga, and gnocchi, and even German spaetzle noodles for clients who develop a higher level of cooking. It’s useful for pressing excess water out of greens that are added to egg dishes. Ricers in antique stores are pricier than if purchased new.

Buying a tablespoon of fresh herbs for a recipe is nearly impossible. A package of fresh herbs can be expensive and wasteful. Timid new cooks may shy away from these flavored additions to simple meals. Silicone ice cube trays provide storage of unused herbs that are ready to pop into a skillet. Finely chop the herb, place a teaspoon into each cube, top with extra virgin olive oil and freeze. When needed, pop them out and sauté along with other recipe ingredients. If you prefer freezing herbs in water, completely thaw, drain and pat dry to avoid splatter and a potential burn when adding to hot oil.

Silicone lids are all the rage. They safely cling to bowls and measuring cups to reduce splatters when cooking or reheating in the microwave. They’re also perfect for overnight refrigeration for leftovers. They come in entertaining shapes, like lily pads and dahlias, and colors to keep you from being bored.

Vegan Pesto

Quick, easy and delicious over freshly cooked pasta or rice. Serve with a side salad of summer fresh lettuces, tomatoes, cucumbers and sunflower shoots tossed with lemon thyme vinaigrette.

Combine basil, nuts, garlic and salt in a food processor. Process (blend) until all the ingredients are finely chopped. Drizzle in the oil and process until it’s smooth and creamy.

3 cups fresh basil leaves
6 tablespoons pine nuts
2-4 cloves garlic
¼ teaspoon coarse sea salt
6 tablespoons olive oil

Combine basil, nuts, garlic and salt in a food processor. Process (blend) until all the ingredients are finely chopped. Drizzle in the oil and process until it’s smooth and creamy.

Note: ¼ cup nutritional yeast and 1 tablespoon lemon juice can be added for a twist in flavor.

“Going green” and “sustainability” are common buzzwords that have been trending in the media and sales pitches for years—and for good reason. The majority of the scientific community has come to a consensus that the climate is quickly changing (1). Our growing global economy, which relies heavily on fossil fuels to operate, is a significant contributor to the emission of greenhouse gasses that are linked to the rapid change of our Earth’s climate. According to the World Wildlife Foundation, we are currently using 1.5 Earth’s-worth of resources for our current population (2). The United Nations’ Food and Agriculture Organization (FAO) has projected that cropland and pasture-based food production will see a 60% increase over the next 30 years, which will increase stress on our valuable finite resources. Agriculture is the main driver of our loss of biodiversity and a major contributor to climate change and pollution, so further land expansion is undesirable (3). With our population expected to grow from 6.9 billion people in 2010, to 9.68 billion in 2050, we have to make some serious changes to help slow and reverse these negative effects (4). Agricultural innovations and technology are a crucial piece to helping efficiently feed the growing global population, but further actions are required if we want to create a sustainable food system.

So what does that have to do with my dinner? Surprisingly, more than you might think. Agriculture accounts for a significant amount of fossil fuels, fresh water usage, and land degradation (5). While all foods have an environmental footprint, some foods score much higher on the spectrum (Figure 1). The most energy-intensive meals are those with large portions of animal protein, with beef being the highest (6). Animal protein is highly energy-intensive due to the massive feed requirements, water consumption, land usage, and transportation costs. For example, to produce one quarter pound hamburger patty, it requires 6.7 pounds of grain, 52.8 gallons of fresh water, and 74.5 square feet of land for grazing and growing crops (7). Global figures are not available, but in the United States, with the world’s fourth largest land area, livestock are responsible for an estimated 55 percent of erosion and sediment, 37 percent of pesticide use, 50 percent of antibiotic use, and a third of the loads of nitrogen and phosphorus into freshwater resources (8).

Agricultural practices currently consume 70% of the world’s fresh water usage to grow and produce the food we eat (9). The water footprint of meat increases from chicken meat (4,300 m3/ton), goat meat (5,500 m3/ton), pig meat (6,000 m3/ton) and sheep meat (10,400 m3/ton) to beef (15,400 m3/ton). The differences can be partly explained from the different feed conversion efficiencies of the animals. Beef production, for example, requires 8 times more feed (in dry matter) per kilogram of meat compared to producing pig meat, and 11 times if compared to chicken meat (10). As demand for fresh, potable water and farmable land continues to rise, how we utilize our natural resources is of increasing importance.

What can I do to reduce my dietary footprint?
Two evidence-based methods that have been shown to reduce environmental impact while increasing food security are to focus on decreasing food waste and replacing our livestock-heavy protein

Figure 1: Barilla Double Pyramid
sources with less energy-intensive protein options such as legumes and pulses (11). The 2013 Australian Dietary Guidelines recommend individual weekly meat consumption of no more than 455 g, or approximately 16 ounces (12). To compare, Americans are currently eating about 83 ounces per week, over five times the recommended consumption (13). Our high intake of animal-based proteins are taking a toll on our environment through deforestation and pollution, and in some cases our personal health.

Whether you or your clients are ready to commit to a fully vegetarian diet or simply ready to reduce the meat intake, eating nutrient-rich plant-based foods is a lifestyle that environmentalists and dietitians alike can agree on. The Academy of Nutrition and Dietetics takes an official stance on plant-based diets, stating that “appropriately planned vegetarian diets … are healthful, nutritionally adequate, and may provide health benefits in the prevention and treatment of certain diseases.” (14). Even Bill Gates states our current animal consumption patterns are not sustainable and must change if we are going to feed 9 billion people by 2050 (15). Plant-based diets filled with fruits, vegetables, legumes, and whole grains provide excellent sources of valuable nutrients and fiber, which over 90% of Americans are lacking in adequate amounts (16).

Many consumers and companies are making honest efforts to try and reduce our environmental footprint to help slow and reverse climate change. As food demands continue to grow, how we use our natural resources such as land and water will be critical to the sustainability of our environment. What you choose to put on your plate can have a direct impact on your health and the health of our planet.

Give it a try by supporting and promoting the environmental efforts of eating less meat, even if it’s just one day a week! Check out the resources below for more information:

- www.vegetariannutrition.net
- www.vndpg.org
- http://www.meatlessmonday.com/

References:

Chris Vogliano earned his Bachelor’s degree in Nutrition Sciences at Ohio State University and Master’s degree in Nutrition and Dietetics at Kent State. Upon graduation, Chris accepted a position at The Greater Cleveland Food Bank. Chris serves as Secretary on the Executive Committee of the Vegetarian Nutrition Dietetic Practice Group. Most recently, Chris took a position with the Academy of Nutrition and Dietetics as an Agriculture, Health and Nutrition Fellow, working to help identify the Academy’s unique niches connecting agriculture to nutrition domestically and internationally.
VN Students

Paleo vs. Vegan Diet Debate

By Sarah Arnold

Being part of the Coordinated Program in Dietetics at Mount Mary University (MMU) in Milwaukee, WI includes participation in the lively Nutrition and Dietetics Club meetings. The monthly meetings provide many opportunities for students to develop professional interests and skills. Members are primarily sophomores vying for limited spots in the competitive dietetics program and juniors and seniors accepted into the program (18 students in each class). The student-run board collaborates to find registered dietitians with diverse backgrounds to share their career experiences with our club. We have had RDs speak on sports nutrition, oral supplements, eating disorders, consulting for a healthy fast food restaurant, and managing a non-profit organization.

Each student in the Coordinated Program is required to complete a learning opportunity by providing a service to a professional organization. This is achieved by becoming a Student Advisor for the Academy of Nutrition and Dietetics assisting with the monthly Wisconsin state AND (WAND) meetings, serving on the board of MMU’s Nutrition and Dietetics Club, or presenting nutrition information at club meetings. Many students choose to share information they have learned through a book review or by making and sharing a snack with an unusual ingredient that is currently creating some media buzz (kombucha or lemon chia muffins anyone?).

During 2014, I served as the Secretary for the Nutrition and Dietetics Club. I had the idea to host a diet debate for our meeting in November, which encouraged discussion of current hot diet trends while allowing students to provide a professional service to our club. In all, four students presented diets. We started with high fat/low carb diets (such as South Beach and Atkins) vs. the low fat and heart-healthy DASH (Dietary Approaches to Stop Hypertension) diet. After the club members discussed and compared these diets, the Paleolithic vs. vegan diets were presented and discussed.

As a brief review, the Paleolithic, or “Paleo” diet encourages eating as our caveman ancestors did, by relying heavily on meat, fish, shellfish, poultry, eggs, fruits, and vegetables. The diet generally excludes all grains, dairy, legumes, sugar, salt, alcohol and caffeine. For the debate, the presenter cited two studies to support the Paleo diet. In one, the Paleo diet was found to be more satiating per calorie than a Mediterranean-like diet in individuals with ischemic heart disease. As a result, study subjects following the Paleo diet consumed fewer calories. The results of another study indicated the Paleo diet was beneficial for individuals with type 2 diabetes because it helped improve glycemic control and cardiovascular risk factors.

The Paleo diet’s meaty foundation is unmistakably different from the animal-free vegan diet. Even so, both diets emphasize fresh produce and exclude dairy products. In vegan diets, the primary protein sources are legumes, nuts, and whole grains. These nutritionally-packed plant proteins may be giving the vegan diet an edge in health. The presenter described extensive evidence that indicates vegans tend to be thinner, have lower serum cholesterol, and lower blood pressure, which contributes to reducing their risk of heart disease.

As the Paleo and vegan diets were compared, much attention was given to possible nutrient deficiencies in the vegan diet. Even though we know vegan meals are nutritionally adequate when planned appropriately, some vegans may lack iron, zinc, fatty acids, vitamin B12, vitamin D, or calcium in their diets. The students in the Club also thought both diets are very restrictive. Overall it seemed most students thought the Paleo diet would be easier to follow than the vegan diet, which is likely attributed to personal preferences. Furthermore, despite the evidence supporting the health benefits of a vegan diet, the students also thought the vegan diet is more of a lifestyle rather than a diet to be recommended for health reasons. Therefore, most students thought it would not be appropriate to recommend either the Paleo or the vegan diet in a clinical setting.

At the end of the diet debate, it was difficult to state a clear winner. The Paleo diet has shone in the news spotlight recently, so perhaps this diet appeared more attractive to many of the students. On the other hand, the vegan diet had stronger evidence supporting its health benefits. Ultimately, the members of MMU’s Nutrition and Dietetics Club agreed that both diets promote eating more fresh fruits and vegetables, which is always a good thing.

Sarah Arnold is a senior in the Coordinated Program in Dietetics at Mt. Mary University. She is currently completing her supervised practice hours and looking forward to starting her career as a RD. Sarah enjoys vegetarian cooking, gardening, and walks along Lake Michigan.
A bitter cold Friday evening in November marked the inauguration of an historic national public health event. The first annual national Plant-based Prevention of Disease Conference, affectionately known as P-POD, brought together physicians, dietitians, researchers, other health care professionals and advocates to discuss evidence-based data on the benefits of promoting and prescribing a whole foods plant-based lifestyle.

The conference was held in Asheville, NC November 14-16, 2014, and was hosted with the help of the Department of Health and Wellness, University of North Carolina Asheville. The educational sessions were held Friday evening through Sunday, with attendees enjoying delicious vegan lunches on Saturday and Sunday. Despite the freezing temperatures, the energy and enthusiasm at the conference was unparalleled. According to Bob LeRoy, the founder and coordinator of P-POD, it took more than five years to get from an idea to the actual conference. Bob is a registered dietitian and has been working as Nutrition Advisor to the North American Vegetarian Society for over 20 years. He had been thinking about creating such a collaborative effort for a long time. His vision finally came to fruition at the three day P-POD conference.

The P-POD Conference started its inaugural evening on the same day as the North Carolina Dietetic Association (NCDA) meeting. This was a coordinated effort for the benefit of attendees. Five of the P-POD speakers, including Vegetarian Nutrition Dietetic Practice Group (VN DPG) past chairs Brenda Davis and Matt Ruscigno, gave a lunchtime presentation at the NCDA meeting to reveal what would be in store at P-POD.

You may ask, why another conference? Aren’t there enough meetings to go to? The simple answer is that given current research, there is a strong need for all health care professionals and the general public to be educated about the importance of moving towards a plant-based diet:

1. According to the Centers for Disease Control and Prevention, chronic diseases are the leading cause of death in the United States (1).

2. According to a recent report released by the International Diabetes Federation, the worldwide number of cases of type 2 diabetes is predicted to reach 592 million by 2035 (2).

3. A 2012 report by the American College of Cardiology states that more than 23.6 million people per year worldwide will die of cardiovascular disease by 2030 (3).

It has now been recognized that these chronic diseases are preventable to some extent, and even reversible with changes in lifestyle and dietary choices (4,5). However, physicians and other health care professionals are not usually trained to provide an integrative approach. Moreover, there is a lot of research being done on plant-based diets but this evidence is not available in a streamlined manner for educating physicians and dietitians. Hence, fewer health professionals have been convinced enough to start prescribing it.

The first annual P-POD responded to these problems via evidence-based explorations of how eating choices may reduce the risks of cancer, cardiovascular diseases, diabetes, bone health and other preventable chronic conditions. While welcoming the general public and students, it provided continuing education credits for physicians, nurses, Registered Dietitians (RDs), Physician Assistants, Nurse Practitioners, Certified Nurse Midwives, Certified Registered Nurse Anesthetists and other practitioners.

P-POD was a collaboration of nonprofit agencies, accepting no funding or support from commercial sources. P-POD’s national nonprofit collaborators were VN DPG, T. Colin Campbell Center for Nutrition Studies, and the Physician’s Committee for Responsible Medicine.

There was an impressive lineup of speakers and presenters at the conference who shared their knowledge and expertise in different areas of practice. There were 19 distinguished speakers that included nine physicians, seven Registered Dietitians and three researchers. Four cardiologists representing a wide geographical area from New York to Texas to Canada, spoke about changes they have made to their own practice where they now talk to their patients about eating a plant-based diet. They shared case studies to show the reversal of disease and proof that we can make a difference in the growing public health crisis. Thomas Campbell, co-author of The China Study, stated that there is a serious lack of nutrition education in medical school, and that conferences like these are crucial to educate physicians about the benefit of plant-based eating for their patients.
VN DPG was also well represented at P-POD. Speakers included former chairs Brenda Davis and Matt Ruscigno, Nominating Committee member and former Nominating Committee Chair Joseph Gonzales, VN DPG Speakers Bureau member and past VN DPG secretary and State Coordinator Jill Nussinow, and Brie Turner-McGrievy who is a recent recipient of the VN DPG Research Grant. The main program reviewer/advisor for the Continuing Medical Education accrediting process was another former Chair of VN DPG, Suzanne (Havala) Hobbs. P-POD’s Needs Assessment, a crucial part of its Continuing Medical Education accreditation process, was based on the work and writing of VN DPG member Susan Levin. The liaison between P-POD and VN DPG was Matt Ruscigno, who also set up a Facebook page and Twitter account for P-POD. Bob LeRoy is also a VN DPG member.

One popular feature of P-POD was a breakout session of interactive discussion groups. Topics included the role of plant-based intervention for heart health, cancer, diabetes, and sports nutrition, as well as general feedback or experiences of the speakers. The speakers were divided into five groups. The attendees could join any group and ask questions to the panel. Three groups were moderated by VN DPG State Coordinators: Danita Hines (Kentucky), Jennifer Swallow (South Carolina) and Parul Kharod (North Carolina). Another interactive discussion group was moderated by Monique Richard, former student columnist for VN DPG’s Vegetarian Nutrition Update and now Chair-elect for the Dietitians in Integrative and Functional Medicine DPG.

Attendees also had the opportunity to participate in some fun activities including a group run led by vegan athletes Matt Ruscigno and Matt Frazier (No Meat Athlete).

Educational sessions focused on research related to diabetes, cardiovascular diseases, cancer, bone health, gut microbiota, and other chronic diseases. Topics also included the impact of the meat and dairy industries on health and the environment. The attendees were very energized by the data presented and discussions ensued on how to create a library for RDs to access this evidence for use in their daily practice.

There has been positive feedback about the conference.

Quote from an attendee: “I have attended many professional meetings, be it FNCE or other state meetings. I have never felt this kind of energy and vibe anywhere else. People attend meetings for different reasons. Everyone has their own agenda. At P-POD, we all were here for the same reason, sharing similar ideas and agendas. There was just a different level of positive energy flowing through.”

Quote from a Speaker: “Thank you so much for creating such a wonderful event and for including me. What a great conference. I am honored to have been one of the speakers. I don’t think that I have met a more amazing and inspiring group of doctors and other health professionals who all seem to be on the same page, in the same book.”

Kerry Barbera, a student and VN DPG member stated, “This conference has to be one of the best educational conferences I have ever attended. I find it very encouraging when cardiologists can speak about their remarkable results of utilizing a plant-based diet with their patients rather than statins or stents. This gives me hope that maybe we are turning the corner and realizing the impact a plant-based diet has on one’s health. I cannot wait to attend next year’s conference!”

For detailed information about the First Annual P-POD Conference, please visit the website http://preventionofdisease.org/about-p-pod/.

With all the enthusiasm it has generated, work is already underway for planning the next P-POD meetings:

Second and Third Annual National Plant-based Prevention of Disease (P-POD) conferences:

North Carolina State University, Raleigh NC
Sept. 11-13, 2015
Apr. 7-10, 2016

Please mark your calendars, and watch for announcements for details and registration information. We welcome you all to be a part of this unique event and experience.

References:


Parul Kharod, MS, RD, LDN served as the VN DPG State Coordinator for North Carolina from 2011 to 2015, and has been actively involved with P-POD from its inception. She works as an outpatient dietitian at WakeMed Health & Hospitals in Raleigh, NC, where she counsels the adult and pediatric population with an integrative approach. Parul has earned a Certificate of Training in Food Allergies from the Academy of Nutrition and Dietetics. An avid cook, Parul loves experimenting in the kitchen with tasty and nutritious plant-based recipes.
Dietetics Programs offer a Variety of Ways to Learn about Vegetarian Nutrition

By Reed Mangels, PhD, RD

The Academy’s most recent position paper on vegetarian nutrition says, “Food and nutrition professionals … should be able to give current accurate information about vegetarian nutrition.”(1) How are our students acquiring this information and the skills needed to provide assistance in planning healthful vegetarian diets? Most nutrition textbooks, from introductory texts to those used in life-cycle nutrition and medical nutrition therapy classes, do include information about vegetarian nutrition. Is this information being used? What are some ways that dietetics programs are teaching students about vegetarian nutrition?

To begin to explore these questions, I conducted an informal survey of some Directors of Didactic Programs in Dietetics (DDP) and some Vegetarian Nutrition (VN) Dietetic Practice Group (VN DPG) members who teach classes in the DDP track. While several respondents commented that they really didn’t cover vegetarian nutrition or that coverage was limited, other programs devoted entire courses or parts of courses to vegetarian-related topics. Another frequently used technique is to include information about vegetarian nutrition in many courses, so that at the end of a four-year program, students have had many opportunities to learn about vegetarian nutrition. This article will provide some examples of different models being used to educate dietetics students about vegetarian nutrition.

Oakwood University, in Huntsville, Alabama, is an example of a school that has a specific course related to vegetarianism. They offer a Vegetarian Cuisine class to nutrition and dietetics majors, minors and non-majors. The class covers the Seventh-day Adventist Christian philosophy on plant-based diets, health issues, and preparation of vegetarian dishes.

More commonly, programs integrate information about vegetarian nutrition into required courses. These courses often include introductory nutrition, life-cycle nutrition, foods, and medical nutrition therapy. For example, at the University of Massachusetts Amherst, students in nutrition and physical fitness (an introductory course for non-majors and majors) participate in a class that covers the basics of sports nutrition for vegetarians. Topics include vegetarian diets and performance, an overview of vegetarianism, protein, iron, and vitamin B12. At New York University, an introductory course on Nutrition and Health covers the different kinds of vegetarian diets and important nutrients for vegetarians.

At the University of North Florida, information about vegetarian foods and food preparation are included in foods courses. For example, in Food Fundamentals, a lecture is devoted to plant-based diets and a separate laboratory class. In the laboratory class, students prepare hummus and tabbouleh, and taste different plant milks, veggie burgers and dogs, and edamame. Health benefits of legumes are discussed as are advantages and disadvantages of vegetarian convenience foods.

Roman Pawlak, PhD, RD, an associate professor at Eastern Carolina University and a VN member, described ways that he includes information about vegetarian nutrition in a course on life-cycle nutrition. He said, “Issues related to vegetarians are brought out pretty much throughout the semester. For example, this morning we discussed essential fatty acids, mainly DHA and EPA. I asked … where do vegetarians get them since they do not eat fish/seafoods? We also discussed issues related to conversion of ALA to EPA and DHA. We discuss vegetarian diets … in the context of planning a healthy diet for children and in issues related to adults and elderly (e.g., heart disease and diabetes prevention and/or treatment). … We bring up vegetarians when discussing anatomical and physiological changes related to aging. In that context we discuss the issue of B12 deficiency as related to digestive track changes and inadequate intake among elderly vegetarians.”

Enette Larson-Meyer, PhD, RD, Associate Professor at the University of Wyoming and past Chair of VN, also highlights vegetarian nutrition in Life Cycle Nutrition. She says, “I try and dispel some of the myths, like the link with eating disorders (we do a case study where the person is using a vegetarian diet to mask an eating disorders) and talk very extensively about it [vegetarian nutrition] in child, maternal, infant and adolescent nutrition.”

In clinical nutrition or medical nutrition therapy courses, instructors may focus on the benefits of plant-based nutrition in health promotion and disease prevention. Results from epidemiological studies such as the Adventist Health Studies and the EPIC-Oxford Study are used to illustrate health effects of vegetarian and vegan diets. At Eastern Carolina University, Dr. Pawlak has students debate controversial issues including methods for blood glucose control among people with diabetes. One group of students defends use of a vegan diet and the other group champions carbohydrate counting.

Interested students can also create ways to learn more about vegetarian nutrition and teach their classmates (and professors) at the same time. For example, when given an opportunity to choose their own topic for an oral presentation or a paper, students can choose a topic related to vegetarian nutrition. I was delighted to hear that UMass’s senior seminar had more than half of the presentations focused on some aspect of vegetarian nutrition. Another way to introduce the idea of vegetarian nutrition into classes is to raise questions— “Would a vegetarian diet be beneficial for the subject of this case study?” “How would a vegetarian follow the guidelines for this diet for kidney disease?” Students raising the questions may end up doing the research to answer their own questions but their instructor will also benefit from the students’ interest and the information that they gather. Students who would like to have an elective course devoted to vegetarian nutrition and related topics should express their interest to the department chair or undergraduate program director. The ideas presented in this article are not, of course, an exhaustive list of ways that dietetics students learn about vegetarian nutrition. If you are aware of other programs and ideas, we’d like to hear from you.

References:

Reed is an adjunct associate professor of nutrition at the University of Massachusetts Amherst where she tries to include information about vegetarian diets in all of her classes. She is a past chair of VN, past newsletter editor and a nutrition adviser for the Vegetarian Resource Group.

While evidence supports the benefits of vegetarian diets in lowering risk for cardiovascular disease, this has not been extensively studied among black populations. It is of particular concern since obesity, diabetes and hypertension are especially prevalent among non-Hispanic blacks. This was a cross-sectional analysis of a subset of 592 black women and men enrolled in the Adventist Health Study-2 and living in all states of the U.S. and provinces of Canada. One-quarter of the participants were West Indian and the rest were African American. Twenty-five percent were vegan or lacto-ovo vegetarian, 13% were pesco-vegetarian and 62% were non-vegetarians.

Compared with the non-vegetarians, black vegans and lacto-ovo vegetarians (as a combined category) had a significantly lower prevalence of major CVD risk factors. The vegetarians/ vegans had a 44% lower odds of hypertension than non-vegetarians. There were no significant differences in hypertension between the pesco-vegetarians and non-vegetarians.

Risk of obesity among the vegetarians/vegans was 43% that of non-vegetarian participants. Vegetarians/vegans also had less than half the odds of diabetes of non-vegetarian subjects. This was probably due in large part to the lower rates of obesity, and the effect was diminished after adjustment for BMI. The vegetarian/vegan diet was also associated with a 9.6 mg/dl lower LDL-cholesterol level with just over half the risk of elevated LDL-C as found in the non-vegetarians.

Although the findings of this cross-sectional analysis cannot establish cause, they suggest that vegetarian diets may have significant benefits in reducing cardiovascular disease among black individuals.


Replacing saturated fat in the diet with the omega-6 fat linoleic acid (LA) reduces levels of LDL-C. However, concerns have been raised that a higher intake of these polyunsaturated fats could promote inflammation since linoleic acid can be elongated to arachidonic acid (AA) and subsequently produce a variety of pro-inflammatory eicosanoids. Evidence suggests, though, that conversion of LA to AA is tightly controlled so that tissue concentration of AA is not appreciably modified by dietary LA intake. In view of this evidence, this meta-analysis and systematic review was aimed at determining the relationship of LA intake to heart disease risk.

Thirteen prospective studies were included in the meta-analysis. The findings suggest a significant inverse association between LA and CHD risk when LA replaces either carbohydrates or saturated fat. There was a dose-response relationship with a lower risk of CHD events and mortality with increasing LA intake. The associations were independent of traditional CHD risk factors and other dietary factors such as fiber and omega-3 fats. The investigators found that a 5% increase in energy from LA when it replaces saturated fat was associated with a 9% lower risk of CHD and 13% lower risk of death from CHD. These findings are consistent with those from a meta-analysis of clinical trials.


In this 4-week randomized trial, the effects of a vegan diet with no added fats and limited avocado and nuts were compared to an American Heart Association (AHA) diet that is based on fruits, vegetables and whole grains, but permits low-fat dairy, fish and lean meats in moderation. The subjects were obese children ages 9 to 18 with hypercholesterolemia and one of their parents. There were 14 child-parent pairs in each group.

Over the four weeks, intake of energy and most measured nutrients decreased in both groups; energy intake and total fat intake were not significantly different between the groups. Compliance with the diets appeared to be good, but not perfect, although unreliability of the measures of compliance was noted as one limitation of the study.

Among the children in the vegan group, there were statistically significant mean decreases in BMI, systolic blood pressure, weight, mid-arm circumference, total cholesterol, LDL-C, markers of inflammation, and insulin. In the AHA group, there were statistically significant mean decreases in weight, waist circumference, mid-arm circumference, HDL-C, and markers of inflammation. Both groups had statistically significant increases in hemoglobin A1c (HgbA1c); the authors noted that these increases were a cause for concern.

Adults in the vegan group had statistically significant mean decreases in BMI, systolic blood pressure, weight, total cholesterol, HDL-C, LDL-C, and HgbA1c. Those in the AHA group had statistically significant decreases in BMI, weight and HDL-C.

At the end of the four weeks, the only statistically significant difference between the groups was that children in the vegan group had significantly lower BMI z-scores and high-sensitivity C-reactive protein levels. Because the study was powered only to detect changes from baseline values in the vegan group within four weeks, it was unable to demonstrate more than a few significant differences between the groups. The study concluded that both vegan and AHA diets demonstrated potentially beneficial changes from baseline in risk factors for CVD and that longer-term randomized trials with more easily accessible vegan foods are needed. Those in the vegan group reported more difficulty purchasing food and the researchers noted that long-term compliance might be a problem.
The researchers also cautioned about the need for vitamin B12 and D supplements and possibly supplements of long-chain omega-3 fats as well.

Effects of Chocolate on Blood Pressure and Risk for Diabetes


Flavanols, a subclass of flavonoids that are abundant in tea, grapes, and cocoa products, have been proposed to protect against cognitive decline and may be inversely associated with diabetes and cardiovascular disease. Three recent studies—one prospective and two clinical trials—looked at the effects of chocolate consumption on risk for disease.

The prospective study followed 18,235 male physicians enrolled in the Physicians’ Health Study who did not have diabetes at baseline. Information about chocolate consumption was obtained from a food frequency questionnaire at baseline and incident diabetes was ascertained through annual follow-up questionnaires. During a mean follow-up of 9.2 years, 1123 men developed diabetes. Chocolate consumption was associated with a lower risk of diabetes but only in men younger than 65 and only in those with a BMI less than 25 after adjustment for lifestyle, clinical and dietary factors. In this study, type of chocolate consumed was not determined which may have led to an over- or under-estimation of the true relationship of chocolate to diabetes risk since the polyphenol content of chocolate on the market varies widely.

The first of the clinical studies (Mastroiacovo et al) aimed to determine the effects of cocoa flavanols on cognitive function, blood pressure control, and metabolic profile in older subjects who did not have dementia. This was a double-blind, controlled parallel-arm study in 90 subjects over the age of 65 years. (Of the three studies reported here, this was the only one funded by the chocolate industry (Mars, Inc.). Subjects were randomly assigned to drink daily for 8 weeks a chocolate drink that was high (993 mg), intermediate (520 mg) or low (48 mg) in flavanol content. Cognitive function was assessed at the beginning and end of the study using a combination of four well-validated standardized tests. Improvements were seen in three of the tests in the groups consuming both high- and intermediate-flavanol drinks. The improvements in cognitive function were associated with a reduction in insulin resistance. There were also significant reductions in blood pressure. Although the improvements seen in cognitive function were moderate, they are of particular interest because they occurred in a relatively short time and were seen in older people without dementia.

The second clinical study (Rostami et al) was conducted in Iran where 7.8% of the adult population has type 2 diabetes. The aim of the study was to examine the effects of a polyphenol-rich chocolate bar (83% cocoa solids with 450 mg flavonoids) on lipid profiles, weight, blood pressure, glycemic control and inflammation in adults with type 2 diabetes and hypertension. Sixty subjects, ages 35 to 70, consumed either dark or white chocolate for eight weeks in this randomized, double blind study. The subjects were instructed about how to make proportional reductions in their habitual diet to compensate for the approximately 150 calories supplied by the chocolate. At the end of the study dark chocolate consumption was associated with reductions in blood pressure but there were no significant changes in triglycerides, fasting insulin, HbA1c or markers of inflammation.

Based on these studies, there is evidence that cocoa flavanols may have moderate benefits for slowing cognitive decline in older people and may reduce risk for developing diabetes in younger men at normal weight, and may also improve blood pressure in people with diabetes.

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 dlucusrd@gmail.com.
Have You Read?

Compiled by Virginia Messina, MPH, RD

Bone Health


Cancer


Cardiovascular Disease


Cognitive Function


Grains


Nutrition Education


Nuts


Obesity and Weight Management


Treating obesity seriously: when recommendations for lifestyle change confront biological adaptations. Ochner CN, Tsai AG, Kushner RF, Wadden TA. Lancet Diabetes Endocrinol 2015, Epub ahead of print.

**Pregnancy**


**Research Issues**


**Vegetarian**


**Back to the Future™: Steering the Way to a Desirable Destination for Nutrition and Dietetics**

What will the profession of nutrition and dietetics look like in 2025? Will there be enough RDNs and NDTRs to provide nutrition services to those in need? Will we be focused on treatment of disease or the prevention of disease? Will we be reimbursed for providing nutrition services? These are all valid questions that members, RDNs and NDTRs, students, and allied health professionals may be asking themselves. It’s too bad we can’t jump in the DeLorean with Marty and Doc to race Back to the Future™ and see what lies ahead!

Visioning, or thinking into the future, is hard to do, but it is a necessary exercise if we want to navigate and reach our desired destination. Visioning is the process of describing the future a group wants to attain. Visioning creates a picture of the desired future, affirms the best of what could be, visualizes what excellence looks like, and shows the best scenario for the time. It is a blueprint for action.

The Council on Future Practice (CFP) has initiated its three-year program of work to describe the future of nutrition and dietetics. The CFP is currently reviewing the literature to identify trends that may affect the future of the profession. But the CFP cannot do this alone. The CFP needs your input, as well as the input of external stakeholders, to identify trends and change drivers affecting the profession. Be prepared to provide your input during the fall of 2015. Further details can be obtained at http://www.eatrightpro.org/resource/leadership/volunteering/committees-and-task-forces/council-on-future-practice. Please contact futurepractice@eatright.org with any questions or concerns.
Meet Our Members

Amanda L. Sager, Maj, USAF, MS, RD

Ginger Hultin, MS, RD, LDN

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

I’ve always been a vegetarian; one of my earliest memories is refusing a ham sandwich as a child because I felt sorry for the animals. When I attended Bastyr University, they offered nutrition education and culinary classes on a variety of diets including plant-based. Plant-based nutrition makes sense to me and I am happy I’ve found a place to practice this type of nutrition professionally at the Block Center for Integrative Cancer Treatment in Illinois.

Please explain your training background, and the nutrition-related jobs you’ve held including your current job.

I have a degree in English from the University of Washington, but I became interested in nutrition after that when I was working in the fitness industry in Seattle. I decided to go back to school at that time, and I now have a Master’s of Science degree in Nutrition from Bastyr University in Kenmore, Washington. I completed my dietetic internship at Edward Hines Jr. VA Hospital in Chicago, Illinois. Before my current position at the Block Center, I worked as an inpatient dietitian at Lutheran General Hospital, a Level I trauma center, specializing in cardiac, long-term rehabilitation and bariatric nutrition. I am also a nutrition writer and freelance often.

How do you incorporate plant-based nutrition into your work?

The foundation of Dr. Block’s ‘Life Over Cancer’ diet is vegetarian, no dairy. We teach oncology and wellness patients about the diet, and give them current evidence-based recommendations for nutrition during and after treatment as well as for general, optimal health. Our center has a wonderful teaching kitchen where the dietitians cook meals daily for patients and their families. Recipe development and food demonstrations are something I enjoy most about my job.

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

Yes! I post original recipes, nutrition information and food travel writing on my personal blog www.becomingginger.blogspot.com. You can see my writing featured on on-line platforms like FitDay, Foodtrients and Food & Nutrition Magazine’s Stone Soup Blog to name a few websites. I am also preparing to launch a nutrition-focused YouTube channel--stay tuned.

In what ways do you feel that you approach nutrition as a profession rather than a job?

I strongly believe that dietitians are specially qualified as nutrition experts and that this profession is a critical link to our population’s health. Though I work in integrative oncology, I am very active professionally at the district, state and national levels including advocating for public policy that supports nutrition. Part of approaching nutrition as a profession is giving back as a preceptor if you can. I manage internship rotations at the Block Center; we take about 6-10 students per year, and help them learn about oncology from an integrative perspective. Volunteering time to move the profession forward is important for any dietitian who can.

What would a day in your life look like?

I almost always get up really early in the morning so I can write before work. I maintain my own blog as well as writing posts and articles for others. I work full-time at the Block Center where I see my oncology and wellness patients for nutrition education, lab interpretation and supplement discussions. I am also the internship coordinator and teach weekly cooking classes. I get to work with clients from around the country and even from around the world; it is always fascinating and rewarding to develop such a close relationship with my clients. In the evenings, I work on projects for the organization I lead as President this year, the Chicago Academy of Nutrition and Dietetics (CAND). I will often have a conference call or meeting with CAND, the Illinois Academy of Nutrition and Dietetics or Vegetarian Nutrition Dietetic Practice Group (VN DPG). I love being involved in different aspects of the nutrition world--giving my time to these organizations energizes me. I love being active so I’ll take a Tabata or yoga class in my neighborhood and make dinner with my husband…or go out.

How do you enjoy spending your free time?

I live in Chicago and I love going out in the city. My husband and I are part of a dinner club where we try new restaurants with a group of friends. Fitness is very important to me; I take a high-intensity Tabata class at our local gym twice a week. Everyone that attends is a ‘regular’ so we are all friends and cheer each other on because it is a really hard class. Traveling is one of my passions, so I try to take a trip at least once per month whether it’s camping in Illinois or Wisconsin, attending a conference in a different city or exploring a new country abroad. I am also social media-obsessed so I spend a lot of free time on Twitter, Facebook, Pinterest, LinkedIn, Yelp and Instagram.

What is one of your favorite vegan/vegetarian meals?

I make awesome lasagna packed full of vegetables; it’s a major crowd pleaser.
Do you aim to follow any particular type of diet (vegetarian, vegan, raw, etc.)?

I refer to myself as a vegetarian. I limit dairy in my diet but I also need flexibility since I value trying new restaurants and traveling so much. I don’t like to be too strict or rigid with eating but I never eat beef or pork and I probably never will. I do enjoy working with people of all diets, however. I find many meat-eaters are interested in incorporating vegetarian meals into their diets and that is fantastic!

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

Definitely join the VN DPG! It’s a wonderful resource with supportive, passionate members. Get some great vegetarian cookbooks and start experimenting—I love Forks Over Knives by Del Sroufe. Follow the blogs of plant-based dietitians such as Virginia Messina and Sharon Palmer for information and inspiration.

State Coordinator Spotlight,
State Coordinator Chair
Compiled by Carolyn Tampe, MS, RD

Tonya Davis, West Virginia State Coordinator, spoke to the Marshall University Student Association on February 5, 2015. Fifteen students attended, most of whom were freshmen. Tonya spoke about the process of applying to internships including the importance of getting involved in DPG’s such as VN. She discussed the benefits of VN DPG membership and by the end, several students were interested in joining!

Are you headed to your State Dietetic Association’s annual spring meeting? State Coordinators from the following states will be there exhibiting for VN DPG: Alabama, Arizona, California, Connecticut, Florida, Illinois, Missouri, Ohio, Oregon, South Carolina, and West Virginia. Contact your State Coordinator if you are interested in volunteering to help with the exhibit.

Have you thought about becoming involved in VN DPG but weren’t sure how? Consider becoming a State Coordinator! State Coordinators connect members locally to the larger organization. Becoming a coordinator is a great way to get involved in the DPG and many coordinators have gone on to other leadership roles. Please contact Carolyn Tampe (ctampe@gmail.com) if you have any questions or are interested in serving as coordinator in your state. VN DPG hopes you will consider this exciting opportunity!

House of Delegates Report
Catherine Conway, MS, RD, CDN, CDE

Preparations are underway for the Virtual Spring Meeting of the House of Delegates to be held on May 2-3, 2015. By the time you read this I will have already requested feedback via eblast from VN DPG members. The backgrounder and fact sheet on the mega issue is available at: www.eatrightpro.org/resources/leadership/house-of-delegates/about-hod-meetings

Originally two topics were planned for discussions: Malnutrition and Corporate Sponsorship. The recent “Kids Eat Right” logo appearing on the package of Kraft Singles changed our plans. We have postponed discussion on Malnutrition and are devoting the entire meeting to the Academy’s Corporate Sponsor Program. I am sure that all of our members have views on this and I would love to hear them. This is of great interest to me and I am pleased that the House of Delegates is exploring it in depth. It is my opinion that the “Kids Eat Right” logo appearing on any food product is an implied endorsement despite the Academy’s insistence that it is not an endorsement. HOD will be looking at the impact sponsorship has on the profession, the Academy, and the Academy Foundation. I anticipate a very lively discussion that is long overdue on “How do we evolve our existing sponsorship program and goals of the Academy while safeguarding the Academy’s reputation and integrity?” I want to be proud to be a Registered Dietitian Nutritionist and not have to try to explain these “associations” with products that only by some real stretch of the imagination can be called food.

Updates and outcomes on previous HOD mega issues can be seen at www.eatright.org member section under HOD. Often one of the outcomes of our meeting is assigning another part of the Academy work to do on an issue we have deemed necessary for our membership and report back to us. You can also review highlights from Committee Reports to the House of Delegate. I urge you to take a few minutes to read it.

I look forward to hearing from all of you.
catherineconway@msn.com
Bookshelf
Reviewed by Timaree Hagenburger, MPH, RD, ACSM Certified Health Fitness Specialist www.thenutritionprofessor.com

The End of Dieting: How to Live for Life

By Joel Fuhrman, MD. Harper One, 2014; 345 pages; $26.99 (cover price); ISBN 978-0-06-224932-6

After thoroughly enjoying many of Dr. Joel Fuhrman’s books, including Disease Proof Your Child and Super Immunity, I feel quite strongly that this latest book is his best! Dr. Fuhrman does a fantastic job bringing together the strongest and most current evidence to support the phenomenal power of nutrient-dense dietary choices. His commitment to citing and explaining the practical implications of the most recent research without “dumbing down” the etiology or scientific principles is obvious, as is his humility and genuine concern for helping people free themselves from the common dieting and disease cycles. He addresses toxic hunger and food addictions, several dietary approaches—including the Standard American Diet, Paleo, Mediterranean, Wheat Belly, and very low-fat plans—and the serious health consequences of gaining and losing weight over and over. The book is filled with practical tips, clear guidelines and useful charts for not only making the “nutritarian diet style” feasible with regard to time, budget and cooking skills, but also for gaining confidence in planning and preparing simple meals and enjoying every bite. Dr. Fuhrman includes a wide variety of approachable recipes, featuring the legendary, health-promoting and disease-preventing GBOMBS (Greens, Beans, Onions/Garlic, Mushrooms, Berries, Seeds/Nuts), and many dressings, dips and spreads.

Dr. Fuhrman now advocates a vegan or “nearly-vegan” diet with less than 5 percent of calories from animal products, as “…the evidence is now compelling enough to show that even 10 percent, which I had suggested as the upper limit in the past, may be too much animal products to optimally protect against cancer.” He cites the Adventist Health Study and explains the impact of as little as 200 kcals from animal products and more than 30 grams of animal protein on IGF-1 levels, which fuel cancer. It would have been even more compelling if he had discussed other consequences of consuming animal products (environmental, economic, ethical, etc.), as they extend beyond personal health and disease risk reduction. While this book should be required reading for every RD, RN and MD, I have also recommended it to friends without any medical background. Although his discussions of the science are quite detailed, his direct and personal writing style, as well as numerous patient vignettes, provide a solid foundation of knowledge and emotionally engage the reader. This leaves the reader empowered to take action steps, experience “excellent health” and serve as an example for others.

Have You Moved?
If you have recently moved, changed your email, or had a change of name, please update your membership information with the Academy of Nutrition and Dietetics to make sure that you don’t miss a single issue of Vegetarian Nutrition Update. The Academy maintains our member address data so you must notify the Academy directly if your information changes. You can do this by:

- Using the Academy’s website (www.eatright.org/obc).
- Faxing changes to 312.899.4812.
- Mailing changes to the Academy of Nutrition and Dietetics Attention: Membership Team 120 South Riverside Plaza, Suite 2000 Chicago, IL 60606-6995.
- Calling the Member Service Center at 800.877.1600 extension 5000 from 8:00 am to 5:00 pm (CST), Monday through Friday.
- E-mailing changes to the Academy Membership Team at membrshp@eatright.org.