The MDA Annual Meeting was held on Friday, April 27, 2012. At the suggestion of our members, we held a one-day meeting. This year was the highest Annual Meeting registration we have seen in many years! There were many great speakers, posters, and exhibitors, providing 7.5 CEU for the day. The following awards were given out at this year’s meeting:

**Outstanding Dietetics Educator Award:** To recognize the teaching, mentoring and leadership activities of faculty and preceptors in ACEND-accredited dietetics education programs.  
**Winner:** Phyllis Fatzinger McShane, MS, RD, LDN; Dietetic Internship Director for the University of Maryland College Park

**Outstanding Dietetics Student Award:** To recognize the emerging leadership and achievement of students in ACEND-accredited and approved dietetics education programs and encourage their participation in the Academy of Nutrition and Dietetics.  
**Winner:** Morgan Denhard; University of Maryland College Park

**Recognized Young Registered Dietitian of the Year:** To recognize the competence and activities of young dietitians in the Academy of Nutrition and Dietetics and to encourage their continued participation in Academy affairs.  
**Winner:** Berit Christensen, RD, LDN

**Outstanding Dietitian of the Year:** The Academy of Nutrition and Dietetics’ highest and most prestigious affiliate award.  
**Winner:** Linda Paren, RD, LDN

**50-Year Maryland Dietetic Association Members**
Thank you and congratulations to the following 50-year members: Roenia Grimes, Marion Harmon, Marcia Kargon, Elaine Smith

**Special thanks to:** Jennifer Talaber, Kathleen Pellechia, and Karen Bellesky for nominating these very deserving individuals. If you know someone deserving of these awards, please feel free to contact Jessica Kiel for more information.

**MDA Poster Award of Excellence Winners:**

**First Place:**  
Three Day Food Records are Highly Correlated with Seven Day Food Records for Energy and Macronutrients  
Submitted by: Emma Cowie, BS, Tova Jacobovits, MS, Jessica Larson, MS, Alyssa Mark, MS, Tricia Psota, PhD, RD, Amber Courville, PhD, RD, Kirsten Zambell, PhD, RD; Nutrition Department, Clinical Center, National Institutes of Health

**Second Place:**  
Case Report: Swift Caloric Advancement and Maintenance in a Pediatric Anorexia Nervosa Patient  
Submitted by: Rachel Zavala, MS; Dietetic Intern, Clinical Nutrition, Johns Hopkins Hospital-Sodexo Mid-Atlantic, Baltimore, MD

*Stay tuned for more information on the 2013 Annual Meeting!*
President’s Message

Jennifer Carman, RD, LDN

As we enter the new year, and new President, Jessica Kiel, takes office. We can applaud the work and events of MDA 2011-2012 membership. We discovered and adjusted bylaws and policy and procedures issues and are going into the new year with revisions to the documentation procedures. As always, please look and review our bylaws and policies and procedures for clarification, and if it does not make sense to you, ask questions, as you are the membership and these are your governing documents. Our Board of Directors must answer to the membership regarding the organization, and we encourage your active participation in reviewing us as a board.

We commend the 50 year members of MDA for their years of service to the Academy as well as to the profession. Congratulations! We look forward to celebrating your years of service with a networking event.

I wish congratulations to the incoming Board of Directors, and of course a thank you with appreciation for those Board members who have finished their year(s) on the Board, are taking a leave of absence, or are changing their jobs on the Board.

I give many thanks to the committees who provided many hours of service to the membership in planning and participating in webinars, seminars, networking and planning for MDA/MAND. Berit Christensen and Mark Rifkin provided guidance and leadership for our legislative efforts to promote the RD in Maryland and to the Public Policy Committee, to the Annual Meeting Committee for their planning and direction, to the Finance Committee for their guidance, to the Communications Committee for leading the way to provide virtual meetings for the membership of MDA/MAND.

I thank Jennifer Schmiel, Executive Director, for providing training and for being “the Voice” that answers the phone and is the go-to person for our organization. As a paid employee, she cannot give her own vote, opinions or voice during committee meetings and events; however we must applaud her efforts to organize MDA/MAND as it is not easy to keep the status quo with a new Board of Directors every year.

As I leave office, I must say to the membership that it has been an honor and pleasure to be able to guide the association as we move into the new name, new logo and new year. I know Jessica Kiel will take firm leadership in directing the organization according to the bylaws and policies and procedures that you, the membership of MDA/MAND have voted for. Welcome New Year!

Notes from the President: Please review the outline of the Annual Business Meeting, and for more detail, refer to the slides from the Webinar held May 30, 2012. Also, the end of year Board reports as well as the Treasurer’s report are available online.

Warmly,
Jennifer Carman, President, 2011-2012

MDA Calendar

Tuesday, June 19, 2012: MDA Executive Committee Meeting
Tuesday, July 10, 2012: MDA Board Meeting
Saturday, July 28, 2012: MDA Board Orientation/Training
Tuesday, August 7, 2012: MDA Board Meeting
Tuesday, August 14, 2012: Chesapeake Lines submissions due
Tuesday, September 11, 2012: MDA Board Meeting
October 6-9, 2012: FNCE, Philadelphia, PA (MDA Member Reception 10/6)

Unless otherwise noted, please email info@eatwellmd.org for more information.
House of Delegates Update
Karen Bellesky, RD, LDN - House of Delegates Representative

First, a couple of updates from my last column:
Thank you to those who took the time to vote for the national positions in February for the Academy as well as your DPG officers. Thank you to those who responded to my survey regarding the topic Continuum of Professional Progression and Growth. Congratulations to the winner of registration for the 2012 or 2013 MDA Annual Meeting, Paulette Thompson! Paulette was able to attend the annual meeting on Friday, April 27. Since the response to the survey was better than other methods I have used, please mark your calendars for a survey in August/September to get input for the October face to face meeting of the HOD.

Current Business:
The HOD met virtually on April 26-27, 2012, discussing the Continuum of professional progression and growth. Were you aware that there is a Dietetic Career Development Guide for Registered Dietitians and Dietetic Technicians, Registered? To locate the Guide on the Academy website, log in as a member, go to “Practice,” click on “Council of Future Practice” and scroll down to the “Dietetics Career Development Guide.” During the virtual meeting on April 26, I suggested that the career guide be more easily accessible to the members as well as more heavily promoted. I repeated this plea during the motion review discussion in early May. The final motion and vote will occur May 24-29. Due to the MDA Annual Meeting, I was not able to attend the second day of the virtual meeting.

Please feel free to contact me with any issues, concerns or compliments regarding our profession. Karen Bellesky 410-752-0954 ext 1229 or 443-792-0388 or kbellesky@gmail.com

Historical Highlights
Anita W. Thomas, MS, RD, LD - MDA Historian

What factors influenced MDA members and the field of dietetics during World War II?
- Attention was focused on nutrition of the masses as well as care of the sick and wounded. Nutrition education of the public became a major contribution of dietitians.
- Food and labor conditions affected hospital food service. Some foods were rationed or in short supply.
- There were 1,998 dietitians commissioned by the armed services. In 1945 the U.S. Congress gave full military status to the dietitian.

MDA Speakers’ Bureau

The Maryland Dietetic Association has established a Speakers’ Bureau that connects local groups and organizations with nutrition professionals for speaking engagements or presentations. The pool of potential speakers is made up of Registered Dietitians and Diet Technicians, Registered who are MDA members. Our speakers cover a variety of nutrition-related issues.

MDA Members wishing to register must submit the following:
- Resume/CV
- Proof of Maryland licensure
- Resubmission of licensure and continued membership in MDA are requirements to maintain listing on the MDA Speakers’ Bureau.

The Education and Research Division Chair will organize/approve applications. Please contact Dr. Meena Somanchi to submit documentation or to request more information.

Members of the public/companies/agercies wishing to hire a speaker:
Please contact Education and Research Division chair, Dr. Meena Somanchi for list of appropriate speakers. This list is provided free of charge.
- Speakers should be contacted directly by those wishing to hire them.
- Speaker fees are negotiated between the organization requesting services and the dietitian.

The opinions expressed by participants in the speakers’ bureau do not necessarily reflect the viewpoint of the Maryland Dietetic Association (MDA). MDA makes no warranties regarding the correctness of the information provided by the speakers and MDA does not endorse, approve or certify such information, nor does it guarantee the accuracy, completeness, efficacy, or timeliness, of such information. MDA accepts no liability for damages of any kind resulting from reliance on any of the information provided therein. MDA assumes no responsibility for consequences resulting from the use of the information herein, or in any respect for the content of such information, including, but not limited to, errors or omissions, the accuracy or reasonableness of factual or scientific assumptions, studies or conclusions, ownership of copyright or other intellectual property rights, damages incurred if material infects or contaminates a user’s system or information, and the violation of property, privacy or personal rights of others.
Maryland Does it Again! Summary of 2012 Public Policy Workshop

Berit Christensen, RD, LD - Public Policy Coordinator

April 15-17, 2012, was the annual Academy of Nutrition and Dietetics Public Policy Workshop (PPW) held at the Crystal Gateway Marriott in Arlington, Virginia, and attended by 400 members from around the country. Participants heard from excellent speakers including award winner Senator Debbie Stabenow (D-Mich.) and Secretary Tom Vilsack. Topics included an update on Medicare (CMS) and intensive behavioral counseling for obesity, panel discussion from the food industry, a beginner session on advocacy and an advanced session on the congressional status, ‘Let’s Move,’ and updates on state and federal issues. State updates included a status summary of state licensure and its importance, as well as the status of state health insurance exchanges in the Affordable Care Act. Federal nutrition bills that were discussed included: S. 2037 Older Americans Act (OAA) Reauthorization, Farm Bill Reauthorization, H.R. 2741 The Preventing Diabetes in Medicare Act, S. 296/H.R. 2245 Preserving Access to Life-Saving Medication Act, and H.R. 3839 The Drug Shortage Prevention Act. The message to Congress would be to support these federal bills with their cosponsor and vote.

Sec. Vilsack speaks on USDA and the role of RDs.

The OAA includes congregate and home delivered meals, as well as nutrition education provided by registered dietitians. Since the last MDA Hill visit, a bill was introduced in the Senate: S. 2037. There are currently no cosponsors, although the bill has had bipartisan support in the past. It is possible the language of the bill could change after a mark-up session.

Drug shortages have been a problem in the U.S. since the early 2000s. Manufacturers are not required to report when a drug shortage will occur. RDs, for example, have been short on vitamin and mineral solutions to provide patients through TPN feedings. S. 296/H.R. 2245 require drug manufacturers to report a shortage to FDA with a six month notice so that FDA can communicate a projected drug shortage to health care providers. This does not solve the problem, but is a start. President Obama declared an executive order on October 31, 2011, to fix the drug shortage problem. Thus, H.R. 3839 was introduced which creates a national “critical drug” list in order to speed up the FDA drug approval process.

In Maryland alone, over 373,000 people have diabetes which costs the state $3.7 billion annually in treatment. H.R. 2741 is an amendment to the Social Security Act in order to include prediabetes Medical Nutrition Therapy (MNT) counseling provided by RDs.

The Farm Bill includes funding for Supplemental Nutrition Assistance Program (SNAP), SNAP-Ed, The Commodity Supplemental Food Program (CSFP), The Emergency Food Assistance Program (TEFAP), The Fresh Fruit and Vegetable Program (FFVP), and nutrition research. Although more funding would benefit these program recipients, the “ask” to Congress is to maintain current funding.

MDA members enjoyed a special networking event on Sunday, April 15 hosted by Karen Bellesky and Berit Christensen. Fourteen Maryland dietitians and students came together from all corners of the state to network with one another and discuss MDA framework and making decisions through the Public Policy Panel, the Academy Political Action Committee (ANDPAC), the Academy Legislative and Public Policy Committee (LPPC) decision process, and strategy for bill messaging to Maryland Congressmen for Capitol Hill visits. The free event, open to anyone regardless of their PPW attendance, offered 1.5 CEUs, and refreshments and wine was served. Attendees commented, “It was very nice to get together,” and, “this was a wonderful effort to bring in new people.”

An evening reception held Monday, April 16 and hosted by ANDPAC honored guest Rosa L. DeLauro (D-Conn.). This year, approximately ten Maryland dietitians and students represented MDA for Capitol Hill visits on Tuesday, April 17 (pictured below).

Like most Hill visits, the group met with all ten Congressional offices from Maryland which include two Senate offices and eight in the House of Representatives. Congressional office meetings were scheduled and led by Berit Christensen, and also led by Karen Bellesky. Karen commented, “Berit set up the meetings so the offices were all in a row and it really saved my feet!” The group focused on the Farm Bill, H.R. 2741, and H.R. 3839 at these visits, as Maryland Congressional offices have already heard from MDA members on OAA and S.296/H.R. 2245 at previous Hill visits. Thank you notes were personally delivered to either the Congressman their self or their office that cosponsored S. 296/H.R. 2245 which include: Sen. Cardin (D), Sen. Mikulski (D), Rep. Cummings (D-7th), Rep. Bartlett (R-6th), Rep. Sarbanes (D-3rd), and Rep. Van Hollen (D-8th). Rep. Bartlett was also thanked for cosponsoring H.R. 3839. Although there is no cosponsor from them yet, Rep. Cummings and Rep. Harris (R-1st) have been working in the market and on the language of the bill and are supporters to solve the drug shortage issue. The meetings were a success and professional relationships will continue to grow in the public policy arena thanks to our presence. MDA members had the honor and privilege to meet three Congressmen and have a photo opportunity, with a special fifteen minute meeting with Rep. Sarbanes (pictured next page). The staff member for Rep. Sarbanes, who MDA has built a relationship with, Dvora Lovinger, rearranged Rep. Sarbanes schedule so he could meet with the dietitians. He even missed an important meeting.

Since PPW:
1. The Farm Bill passed the Senate Agriculture Committee (12-4 vote) The bill is expected to reach the Senate floor for a vote in May.
2. Phyllis Fatzinger McShane (Director, NFSC Dietetic Internship, Department of Nutrition and Food Science, University of Maryland College Park) and Lisa Lachenmayr (Program Director, Food Supplement Nutrition Education, University of Maryland Extension) have been making arrangements

Continued on page 5
with Amy Schultz, the staff member the MDA group met with at PPW for Rep. Hoyer’s (D-5th) office, for Rep. Hoyer to do a SNAP-Ed site visit in St Mary’s County. Maryland dietitians continue to build relationships with Congressmen and are showing them value in our profession and the services we provide.


4. Berit Christensen spoke at the MDA Annual Meeting providing a summary of the federal nutrition bills and an update from PPW, and invited and introduced Sen. Cardin to speak at the meeting reception on the topic of CMS and RD coverage for intensive behavioral counseling as well as the health care reform framework and the RD role (pictured below). The reception was sponsored by ANDPAC giving equal contributions to Sen. Cardin’s campaign and MDA Annual Meeting fund. (Note: ANDPAC is an effective bipartisan effort to support candidates who champion nutrition bills that matter to the Academy’s strategic plan. The state Public Policy Coordinator and affiliate members identify these candidates and apply for contributions.) Berit Christensen had time to discuss with Sen. Cardin the challenging and competitive process of becoming an RD, that he represents 2,257 RD constituents in Maryland, and asked him to introduce the Senate Companion Bill to H.R. 2741 to which he seemed interested and also concerned with the amount of Maryland diabetics and consequential health care costs associated.

5. A press release will be sent to media outlets on Rep. Sarbanes and Sen. Cardin speaking to MDA members in order to promote visibility.

Your profession needs you to be involved with public policy. If the RD voice is not heard by Congress, the competition might be drafted into bills instead. This will directly and indirectly affect your job, the value of our profession, and the people we work with. Thank you to those of you who attended PPW and others who have continued to participate in public policy activities in Maryland. Please contact Berit Christensen (bmchrist@cord.edu) if you would like to be more involved or have any questions or concerns.
As the age of America’s population rises, age-related neurodegenerative diseases such as Alzheimer’s disease and dementia have garnered a great deal of attention, not only from the health care community but also from public policy makers. In January, the Obama administration set forth the National Alzheimer’s Project Act in an effort to address the care and treatment of Alzheimer’s disease. As part of this plan, President Obama committed over half a billion dollars towards Alzheimer’s research in an effort to fight this epidemic (1). Studies to date have shown that age-related decline is multi-factorial with nutrition and lifestyle choices affecting disease development and progression (2). In light of recent public policy initiatives, registered dietitians are encouraged to be a part of this national discussion in an effort to find a cure for age-related disease.

According to the Alzheimer’s Association, an estimated 5.4 million people have some degree of Alzheimer’s disease, a form of dementia that results in a decline in cognitive function (3). Over time, oxidative stress and inflammation in the body can lead to the development of hard plaques in the brain. These plaques cause damage to neurons, the cells responsible for transmitting signals and coordinating cognition. When these cells are damaged, they become less efficient in communicating signals. As more neurons are damaged by stress and inflammation, which accumulates with age, the process of cognition is diminished (4). Early symptoms of cognitive decline include memory loss, confusion, difficulty solving problems, and changes in personality or mood (5).

While age is the most common risk factor for Alzheimer’s disease, cognitive decline is not necessarily inevitable in old age (3). In fact, many individuals live well into their older years without any sign of a decrease in neurological function. Age, genetics, and family history play a role; however recent research suggests that dietary and lifestyle factors can also profoundly affect brain aging. Factors such as insulin resistance, obesity, and metabolic syndrome all affect vascular health and cause an increase in inflammation and oxidative stress in the vulnerable brain (2). This emphasizes the importance of maintaining good cardiovascular health and lifestyle habits throughout the lifespan.

As life expectancy increases and the cost of treating age-related disease continues to rise, research has increasingly focused on those dietary compounds and lifestyle factors that may actually slow or reverse the process of brain aging. Polyphenols, the primary antioxidant molecules in berry fruits, have been shown to enhance motor function, working memory and overall cognitive functioning in rat models. It is hypothesized that these molecules, found in strawberries, blueberries, blackberries and even grapes, work by combating free radicals in the brain and reducing oxidative stress (6-9). In lab studies, rats with higher levels of physical activity were shown to have higher concentrations of BDNF in the hippocampus region of the brain. These rats also had improved cognition and decreased levels of cellular dysfunction when compared to sedentary rats (13). More research is needed to identify the optimal level of physical activity necessary to promote brain health. Currently, the Dietary Guidelines for Americans and the Centers for Disease Control and Prevention suggests 150 minutes of moderate-intensity physical activity a week to promote a healthy weight and cardiovascular health (14,15).

As rising healthcare costs continue to burden nearly every American, renewed interest has been focused on disease prevention and health promotion. With an increase in federal funding, the Obama administration is hopeful that researchers can find a cure for Alzheimer’s disease by the year 2025. Until that time comes, research to date suggests dietary compounds and physical activity may be beneficial in combating brain aging and cognitive disease. As food and nutrition experts, registered dietitians can join the fight, along with other medical professionals, in improving treatment and finding a cure for Alzheimer’s and other neurodegenerative diseases.

For more information, please visit the Alzheimer’s Association website at http://www.alz.org/.

References
**Say Yes or No to that Cup of Joe?**

*Natalie Khoo - Diietetic Intern, Johns Hopkins Bayview Medical Center*

Coffee is one of the most commonly consumed beverages with more than 150 million people in the United States drinking it daily (1). The average amount consumed in the U.S. is around two cups a day, which is approximately 280 mg of caffeine (1). Despite its regular consumption, the effects of coffee on health are still controversial with many conflicting conclusions from different studies. Caffeine or other compounds in coffee can elicit effects on several systems in the body such as the endocrine, gastrointestinal, neuropsychiatric, skeletal, or cardiovascular systems (1). This article aims to present some of the current literature available on this topic.

### Endocrine

Coffee consumption has been shown to have a beneficial effect on the endocrine system by decreasing the risk of developing type 2 diabetes mellitus (DM) (1). Six of nine prospective cohort studies have shown a significant decrease in risk of developing type 2 DM with consumption of coffee ranging from three to ten cups daily as compared to those drinking two or less cups daily (2). Some of these studies also found modest inverse associations between decaffeinated coffee consumption and decreased type 2 DM risk, showing that there may be compounds besides caffeine eliciting protective effects on the endocrine system (2). There is evidence that long-term caffeine consumption can improve insulin sensitivity and promote better postprandial glycemic control (no evidence for fasting glucose levels) in individuals with diabetes (1, 2). A study showed that those who consumed at least five cups of coffee daily had a 50% lower risk of developing impaired glucose tolerance (2).

### Neuropsychiatric

The caffeine in coffee has been found to improve alertness, energy and the ability to concentrate, which is probably why many people start their day with some coffee (1). Caffeine has also been shown to help alleviate migraines (1). However, caffeine is also an addictive compound and cessation of chronic caffeine intake can lead to migraines due to caffeine withdrawal (1).

Coffee has interestingly demonstrated some beneficial effects on neurological diseases. There are studies that have shown a dose-response relationship between coffee intake and decreased risk of Parkinson’s disease for some populations (1). However, for women taking postmenopausal hormonal therapy, six or more cups of coffee instead led to an increased risk for Parkinson’s disease (1). There is also evidence that consuming coffee may be protective against Alzheimer’s disease (1).

### Cardiovascular

There may be compounds in coffee that show potential harmful effects on the cardiovascular system. Diterpenoids (cafestol and kahweol), mainly found in unfiltered coffee, are such compounds (1, 2, 3). Diterpenoids may lead to increased plasma low-density lipoprotein (LDL) cholesterol and may even lower levels of high-density lipoprotein (HDL) cholesterol, which is the opposite of what we usually desire for good health (1). However these compounds get caught in filter paper and hence are not present in filtered coffee and studies have shown that filtered coffee can be healthier than unfiltered versions (3).

There is also evidence that consumption of around three cups of coffee a day may have a protective effect against myocardial infarction (MI) (1). However, for individuals susceptible to cardiovascular disease (CVD), heavy coffee consumption may lead to arrhythmia and other coronary events, which could be a reason why caffeine may be restricted for patients on cardiac diets (1). Coffee consumption is still not regarded as a long-term risk factor for CVD (1).

### Gastrointestinal

Coffee and its laxative effects are well known to most, and may affect some more than others. Caffeine in coffee can stimulate movement of the smooth muscles of the bowel and lead to increased motility and decreased constipation (1). Drinking caffeinated coffee is also associated with decreased risk for symptomatic gallstone disease (in men), while decaffeinated coffee was associated with lowered risk of rectal cancer (3).

### Skeletal

There is good data implying that high consumption of coffee can negatively affect bone health by decreasing bone mineral density, hence increasing fracture risk (in women), especially when coupled with low calcium intake (1). Additionally, high caffeine consumption in coffee can lead to increased calcium losses in urine (3). However, some studies have shown that the correlation of caffeine on lowered bone density was insignificant if calcium intake was at least 800mg a day (1).

### Overall Mortality

Large studies including Nurses’ Health Study, Health Professionals Follow-Up Study, and Miyagi Cohort Study have been analyzed to observe the relationship between coffee intake and all-cause mortality. They have shown decreased all-cause mortality for those who drank more than three to six cups of coffee a day, compared to those who drank zero to one cup a day. However, this association definitely warrants further investigation (1).

In conclusion, it is important to differentiate if the health effects of coffee are due to caffeine itself or due to other compounds in coffee. Also, metabolism of coffee may differ from individual to individual in the body (1). Most importantly it is important to note that despite the potential health benefits of coffee, drinking coffee should not be a substitute for a healthy, well-balanced diet that incorporates plenty of fruits, vegetables, whole grains, lean protein, and low-fat calcium sources, in addition to regular physical activity. Coffee should not be seen as a “health food” to help prevent diseases and there are currently no recommended intakes determined as preventative against diseases. However, there is also not enough evidence that finds regular, moderate coffee consumption unsafe for the general population (except in certain stages of life such as pregnancy) (3). Additionally, drinking coffee loaded with caloric additives can negate the potential health benefits of coffee as it will become a sugar and fat-laden caloric beverage that can contribute to weight gain and other chronic diseases. The fact that coffee is addictive and has stimulatory effects still calls for it to be consumed in moderate quantities. As everything we include in our diets, moderation is key.

### References

Clinically Speaking

Common Appetite Stimulants of Today
Erica Midgley - Dietetic Intern, Johns Hopkins Bayview Medical Center

Orexigenic agents, widely known as appetite stimulants, are frequently prescribed in our healthcare system today. However, there is limited knowledge on the mechanism of action behind orexigenic agents and the role the registered dietitian plays in their utilization.

• What is an orexigenic agent?
Orexigenic agents are medications or hormones which aid in the increase of one's appetite (1). Ghrelin, a hormone, and neuropeptide Y, a neurotransmitter, play a role in appetite, energy balance, and weight gain (2). Neuropeptide Y is a 36-amino acid peptide which plays a large role in the association between energy balance, food intake, memory, and learning (2).

• Who benefits from taking an appetite stimulant?
Any individual who may be malnourished, has lost weight, or simply needs to gain weight can benefit from an appetite stimulant (3). Specific populations include the elderly, patients that have HIV/AIDS, cancer, or individuals that experience anorexia (4,5).

There are few medications that contain FDA-labeled indications for weight gain, cachexia, and/or loss of appetite. Three widely used orexigenic agents that may be seen in the various populations listed above could be one of the following:

Megace® (Megestrol Acetate)
Megace®, one of the most popular and widely studied appetite stimulants, is a derivative of progesterone but the mechanism of action as an appetite enhancing agent is unknown (6). This medication is FDA-labeled indicated for endometrial carcinoma, breast cancer, and cachexia associated with AIDS (6). Unfortunately, adverse effects that have been seen by patients taking Megace® include hypertension, nausea, vomiting, sweating, anemia, and glucose intolerance (6).

Marinol® (Dronabinol)
A derivative of the synthetic form of THC (tetrahydrocannabinol), an active ingredient in Cannabis, this medication has an FDA-labeled indication to help treat the loss of appetite for patients with AIDS (6,7). The mechanism of action is unknown but its antiemetic effects may be due to the inhibition of the control mechanism within the medulla oblongata, which directly affects autonomic and involuntary functions (6). Adverse effects of taking Marinol® have been hypertension, hypotension, xerostomia, vasodilatation, and euphoria (6).

Oxandrin® (Oxandrolone)
A medication with an FDA-labeled indication for weight gain, Oxandrin® is an anabolic steroid that suppresses the gonadotropic function of the pituitary gland (6). It increases low-density lipoprotein and decreases high-density lipoprotein and is cautioned for patients at risk of hepatic disease (8). Other adverse effects of this medication include an increased risk of atherosclerosis, edema, cholestatic hepatitis, and jaundice (8).

Each of the medications listed above have been tested in various patient populations, and varying results have been examined. There are a multitude of medications on the market which have adverse effects to stimulate the appetite, which in turn results in weight gain but are not FDA indicated to increase appetite or produce weight gain. A few of these medications include Periactin® (Cyproheptadine Hydrochloride), Reglan® (Metoclopramide), and Re-meron (Mirtazapine) (9).

• As a registered dietitian, what can you do for a patient that may benefit from taking an appetite stimulant?
You can discuss with the patient’s provider which medication is appropriate, taking into account that each patient requires individualized treatment. Consider whether or not alternative treatments such as small meals, snacks, or nutrition supplements will benefit the patient and improve their overall outcome.

While concerns related to the cost, efficacy of medications, and safety are frequently scrutinized, the best way to become familiar with the various orexigenic agents available is to conduct and/or review research regarding the medications that are offered.

References
The evolving ketogenic diet

The ketogenic diet (KD) is best known for its use in treating intractable seizures. It was first reported at the American Medical Association convention of 1921 when fasting was found to produce quick and long term improvement in seizure control. Researchers learned that a diet high in fat and restricted in carbohydrates (CHOs) could mimic the same effect as fasting and was widely used in the 1920s and 30s until the development of anticonvulsant drugs. The KD was brought to light again in the 1990s by two year old Charlie Abrahams. He was treated by multiple procedures and surgeries for his epilepsy with no relief in his symptoms. His father Jim Abrahams, a popular Hollywood producer, brought him to Johns Hopkins Hospital in 1993 where he was placed on a KD. After initiating the diet his seizures were controlled in only a few days. Shortly after, Jim Abrahams launched The Charlie Foundation to promote research and bring awareness to the diet (1). Currently there are 80 Ketogenic centers in the U.S. and over 50 countries worldwide have an active center (2,3).

Although the diet is gaining momentum globally, some physicians still believe it should be used only as a last resort. Additionally, there is a lack of registered dietitians trained in the implementation and monitoring of the diet attributing to it being underused (1,4).

The classic KD is a high fat, minimum daily requirement of protein, and CHO restricting. It has a 4:1 ratio of fat to CHO and protein (90% kcals fat, 10% kcals CHO and protein). In some cases a lower ratio may be used such as 3:1, 2:1, or 1:1. Calories are initially controlled to 80-90% of daily recommendations (2). The goal of the diet is to initiate the starvation mode through the oxidation of fatty acids to acetoacetate, β-hydroxybutyrate, and acetone. 10-20% of children on the diet will have seizure activity completely controlled. In half of the remaining, 80-90% will have a decrease in seizure activity or need for medications (5).

Variations to the diet have developed and include the use of MCT oil, Modified Atkins Diet, and Low Glycemic Index diet. The use of MCT oil yields more ketones/kcal and are absorbed faster, the increased ketogenic potential means less total fat is needed which allows for more CHO and protein in the diet. It is provided as 50-60% MCT oil, 19% CHO, and 10% protein. However, MCT oil is expensive and its use must be increased gradually taking longer to achieve seizure control. Additionally, it has been linked to liver failure in those on the anticonvulsant Valproate (6). The Modified Atkins Diet was created to be more palatable and used as a suggestion for those with questionable compliance or reluctant to begin the classic diet. It can be started on an outpatient diet and requires less involvement from the dietitian. It provides 65% of calories from fat; CHO is limited to 10g/day for 1 month and then increased to 15 g/day and up to 20-30g/day as tolerated for seizure control. Seizure improvement may begin to show within 2-4 weeks. Switching to the Modified Atkins Diet after therapy on the KD may be a consideration (7). The Low Glycemic Index diet was developed on the hypothesis that stable blood glucose levels play a part in the mechanism of the KD. It liberalizes CHO intake to 40-60g/day of low Glycemic Index foods. It still has some effect for reducing seizure activity and maybe more appropriate for adolescents who have increased nutrient needs and adhere better to a more liberalized diet (3).

Due to the success the KD has had in the treatment of epilepsy, it is also being studied for use in other neurological and chronic diseases. One area being investigated is the use of the KD in the treatment of brain tumors. Glucose and glutamine are prime fuels for driving the growth of malignant tumors.

References:
Adjunct Teaching Positions – Anne Arundel Community College

We are looking for adjunct faculty who can teach BIO 135 Principles of Nutrition in an online format throughout the year. This course counts as a general education science course and is also taken by allied health majors. Minimum qualifications include Masters degree in related field. Ph.D. and previous teaching experience desirable. Position pays $2000 – 2300 per course, depending on credentials. If interested, please send resume to Amy Allen-Chabot at amallenchabot@aacc.edu or at the address below:

Amy Allen-Chabot
Biology Department
Anne Arundel Community College
101 College Parkway
Arnold MD 21012
Learning Opportunities from the Academy of Nutrition and Dietetics

Karen Bellesky - House of Delegate Representative

1. A new leadership track has been developed for FNCE 2012. The educational track will be open to all FNCE attendees and will cover programs across all educational levels. Sessions will be offered over all three days within the following guidelines:

Leadership Track: Transition from manager to leader through intensive sessions on career laddering, organizational design, leadership values and crucial conversations at FNCE.

2. A new Certificate of Training was released on the topic of Leadership.

Online Certificate of Training: Developing Your Role as Leader

- Module 1: Transformational Governance (Level 1, 2.0 CPEU)
- Module 2: Exceptional Leadership (Level 1, 2.0 CPEU)
- Module 3: Leadership: An Appreciative Approach (Level 1, 2.0 CPEU)
- Module 4: Communicating as a Leader (Level 1, 2.0 CPEU)

Visit www.eatright.org/cpd/online for more details.

3. Additional Certificates of Training in Leadership (Level 2 and 3) will be developed and released over the next 12 months.

4. A new Certificate of Training is in development on the topic of Executive Management. Estimated release date is August/September 2012. The overarching goals are to equip the RD to develop visibility and actions that foster “buy in” or promote management and administration as integral to practice, as well as to facilitate development of management and leadership in the profession.

Online Certificate of Training: Executive Management

- Module 1 - Executive Management: Impact on the Profession and Use in Different Practice Settings
- Module 2 - Managerial Communication
- Module 3 - Career Laddering & Succession Planning
- Module 4 - Using Strategic Management to Enhance the Professional Competitive Advantage
UNION INSTITUTE & UNIVERSITY’S
CERTIFICATE IN HEALTH EDUCATION

A NEW OFFERING
Union Institute & University’s Certificate in Health Education offers fully online, innovative, and emerging graduate level courses, designed for a new generation of health professionals, educators, dietitians, and other professionals.

Whether your goal is to enhance your resume, build your skills, add value to your service with your employer, or explore a new career path, the Certificate in Health Education lays the foundation for you to serve the community as a proactive health educator. Courses can be taken individually to enhance professional knowledge, meet national credentialing requirements, or begin a path towards a graduate degree. Courses are aligned with the National Commission for Health Education Credential’s Seven Areas of Responsibilities for Health Educators and their exam application requirements for the Certified Health Education Specialist (CHES) credential.

WHO SHOULD APPLY?
- Public health workers looking to advance their career through part-time graduate studies
- Business or other professionals who deal with or in public health systems
- Health professionals who want to take the first step towards a graduate degree
- Recent college graduates who seek to enhance their knowledge & expertise in public health
- Professionals in health fields seeking a national health educator credential

Applications are currently being accepted and admission occurs on a rolling basis. To be accepted into the certificate program, applicants must:
- Hold a bachelor’s degree
- Provide a letter of recommendation
- Provide a goal statement
- GRE scores are not required for admission

Students may also apply to take individual courses without applying for the certificate. Completion of a bachelor’s degree is needed to take individual courses.
- The Certificate in Health Education is a 15-hour graduate certificate, offered at a flat discounted rate of $5,750, with an additional 9 hours available as optional courses.
- Two to four courses, (3 credit hours, 8 weeks), will be offered each session. For students who take one course per session, the certificate can be completed in 10 months. The time limit for completion is three years.
- Students may elect an accelerated or slower pace to meet their personal needs. Courses may be taken individually and are offered at the standard graduate credit rate of $618 per credit hour.
- For students whose past education meets many of the NCHEC requirements, the individual courses allow you to complete the necessary courses that you may still need to apply for the CHES exam.

CONSIDERING A GRADUATE DEGREE?
Courses may also be transferred into many graduate programs, including the UIU Master of Arts, Health & Wellness concentration. Please check with appropriate administrators when applying to learn specifics.

ADMISSIONS | www.myunion.edu/healthcare

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