Co-President’s Message

Who among us has not used creative strategies to overcome the barriers for change? In the health care industry we are faced with the need to make many changes on multiple levels often on a daily basis. On that note, CMS just announced the heart failure criteria for coverage under cardiac rehabilitation that will begin sometime this year, possibly as early as this spring. Cardiac Rehabilitation programs will be challenged to meet the needs of this population from an administrative as well as a program level. Early successful integration will be enhanced by your involvement with the Massachusetts Association of Cardiovascular and Pulmonary Rehabilitation (MACVPR). Heart failure is in full swing in some parts of the country. Cardiac Rehabilitation programs will continue to provide strategies to overcome the many hurdles we are faced with in today’s health care environment. Challenges range from long waiting lists, limited resources, high co-pays for patients, obtaining and maintaining certification to name a few. The MACVPR educational and networking opportunities allow us to share successful strategies as well as brainstorm innovative practice models to remain solvent and in the forefront of cardiovascular and pulmonary rehabilitation care.

The hard work of the executive committee continues to move the association in a forward direction and I am proud to be leading this year’s committee with Co-President Karen LaFond. Together we have adapted our strategic plan in line with our predecessors Robert Berry and Dennis O’Brien. As an affiliate of American Association of Cardiovascular and Pulmonary Rehabilitation (AACVPR) our plan closely models the national initiatives. This means our educational programs, networking discussions, newsletter articles and columns, as well as the website features including our forum will support your program’s efforts on understanding reimbursement issues, initiating the certification processes (both program and the new professional certification), showcasing innovative ideas and disseminating original research.

Our strategic plan includes the following:

I. Retain and increase membership to ensure the MACVPR remains the preeminent professional organization for cardiac and pulmonary rehabilitation.

• Increase membership and widen the distribution of multi-disciplinary team members.
• Provide continuing education (CE) opportunities for multiple disciplines through the American Association of Critical Nurses (including respiratory and dieticians CEs).
• Open up the MACVPR New England Cardiovascular & Pulmonary Rehabilitation Symposium to nonmembers.

II. Encourage and support increasing the quality of cardiac and pulmonary rehabilitation in Massachusetts through innovative strategies, evidenced base practice and research.

• Offer cutting edge educational programming as well as networking opportunities during our general meetings and MACVPR New England Cardiovascular & Pulmonary Rehabilitation Symposium
• Recognize best practice and quality improvement efforts as well as support research by hosting posters sessions
• Encourage innovation by working with AACVPR to host a competition for the Innovation Award with each state/regional winner representing the affiliate in the national contest.

III. Improve the utilization of Cardiac and Pulmonary Rehabilitation in MA

• Address and educate health care providers about the Performance Measures for Cardiac Rehabilitation (new for 2014) a CMS and Quality Measure
• Enhance the website to include an updated program directory
• Support the legislative issues that will improve access to care for our patients.  Continued
I am once again happy to say we have another informative edition of **MACVPR NEWS**. Many thanks to all that have contributed.

Deirdre Proudman MSN, RN has contributed to our feature “The Beat Goes On...EKG Challenge” in which she discusses an interesting finding on a rhythm strip and presents it as a brief case study.

Pam Ressler MS, RN, HN-BC has once again continued her contributions to our newsletter and has written a helpful article **Mindfulness: What it is and What is Isn't.**

Holly Brassett MS, RD, LDN, has contributed another article in her new column “Tidbits From the Dietitian” This time she discusses vegetarian diets. Feel free to email me with any questions you may have for her. She is eager to answer any questions.

We also have our usual committee reports and summaries of the informative presentations at the January meeting.

Once again I encourage everyone to use the MACVPR website including the forum which is much more user friendly and a great way to share information with other members, and get your questions answered by others in your field. Hopefully more people will begin to utilize this great resource.

Please feel free to e-mail me and share your ideas. I am always interested in your thoughts to improve the newsletter. Let’s hope for an early Spring...think warm!!

Lynne MacDonald, PT
Beth Israel Deaconess Hospital-Milton Cardiac Rehab
Newsletter Editor  newslettereditor@macvpr.org

A leader is best when people barely know he exists, when his work is done, his aim fulfilled, they will say: we did it ourselves. —Lao Tzu
Deborah Sullivan, MS, ANP-BC
Karen LaFond, MSN, RN
Co-President’s  president@macvpr.org

We would like to thank Robert Berry for his service on the Executive Committee. He has had to resign to focus his efforts on other professional commitments. We have been very fortunate to have benefitted from his leadership skills for the past three years. We appreciate Esther Burchinal stepping back in her formal role as Past Co-President.
As we continue to weather the stormy winter in Massachusetts, we also continue to do so in the fields of Cardiac and Pulmonary Rehabilitation. However, the warm spring weather is approaching as well as the opportunities for our programs and patients listed below.

**Medicare coverage for HF:**
Per AACVPR updates, CMS has announced a proposed decision that the diagnosis of heart failure, including patients who have an ejection fraction of 35% or less and New York Heart Association (NYHA) class II-IV symptoms despite being on optimal heart failure therapy for at least 6 weeks, will qualify for CR coverage. After making formal revisions and formatting changes, the final National Coverage Determination (NCD) based on this proposed decision will be posted in the NCD Manual in 2014, possibly in the spring. The exact date for coverage will not be known until this NCD is posted.

**CMS payment rates for 2014:**
The proposed CMS 2014 payment rate for CR shows an increase from $80 to $102 for codes 93798/93797. The co-pay (secondary insurance or patient portion) will be $20.39. The proposed 2014 rates for PR remain at $39 for code GO424 with a co-pay amount of $7.87. The payment for Respiratory Services (PR for non-COPD patients) increased from $35 to $39 per 15 minutes increments. This is for the timed procedure codes G0237 and G0238 and the untimed group exercise code G0239. The co-pay will be $7.87. The CR increase is thought to be a result of more programs using the nonstandard cost center option to report costs, resulting in more accurate cost reporting. All CR programs are advised to continue to use this nonstandard cost center reporting. It is advised that all PR programs use the Pulmonary Rehab Tool Kit so that PR costs are more accurately reported. If more PR programs follow this recommendation than more accurate charges should be reported. A majority of PR programs must make these changes to support increases in PR reimbursement in 2015 and 2016.

**DOTH March 13-14, 2014** in Washington DC will address US Congressional members about the need to use non-physician practitioners to meet the direct physician supervision requirement in CR and PR programs. Several MACVPR members are attending. If you are interested in joining these members in this vital cause, please contact Ann at admin@macvpr.org.

**KX Modifier for CR/PR:**
Remember that the KX modifier is required for patients that exceed 36 visits since 1/1/10. There must be documentation indicating the medical necessity for this extension and note that the patient is beyond the 36 visits.

**Jurisdiction K Transition:**
After the last cutover date of 10/25/13, The National Government Services JK A/B MAC will handle all functions regardless of the claim date of service for the Jurisdiction 13 and 14 MACs. For more information go to National Government Services at a Glance website: www.ngsmedicare.com/ngs/portal/ngsmedicare/jktransition.

I am honored to step back onto the MACVPR Executive Committee as Past Co-President and look forward to continue working with Dennis, the EC, and you, the members. We appreciate all of Robert’s expertise, time, and dedication leading the Executive Committee as Co-President the past two years and will miss his presence on the EC but understand the many other commitments that he has. Thank you, Robert!

Respectfully submitted,
Esther Burchinal, MS, CES, RCEP    Emerson Hospital Cardiac Rehab

Dennis O’Brien, BS, RN,    Baystate Health Pulmonary Rehab

Immediate Past Co-Presidents  www.macvpr.org

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**Distinguished Service Award**
Bi-annually this award is presented to an active member of the MACVPR who has made outstanding contributions to the field of cardiac and/or pulmonary rehab, the MACVPR/AACVPR and/or has demonstrated commendable efforts toward clinical advancement in primary and secondary prevention of people with cardiovascular and/or pulmonary disease.

Nominations are now being accepted and should include a paragraph as to why this individual should be considered for this award. The recipient will be announced at the October meeting; and will receive a two year membership to the MACVPR, a plaque, and the fee for that October meeting is waived.

Nominations should be sent to admin@macvpr.org by September 1, 2014.
By Deirdre Proudman, MSN, RN
Lowell General Hospital Cardiac and Pulmonary Rehabilitation Center

75 year old male with history of chronic atrial fibrillation, anticoagulated for CVA prophylaxis, developed hypotension on AV nodal medications with left ventricular dysfunction leading to AV nodal ablation and St Jude pacemaker insertion VVIR mode. No prior history of hypertension, diabetes, CAD, CVA, peptic ulcer disease, never smoked. This patient was referred to cardiac rehab s/p Inferior STEMI with primary PCI of RCA (bare metal stent) and normal LVEF. Medications included Metoprolol 25 mg daily, Warfarin 5 mg daily 1-2 tabs per anticoagulation clinic as directed, Primidone 150 mg daily, multivitamin 1 tablet daily, Vitamin B-12 500 mcg daily, Atorvastatin 80 mg daily at bedtime, Aspirin 81 mg daily.

1. The patient presented to cardiac rehab in the rhythm below; the rhythm is:

A. sinus bradycardia
B. junctional rhythm
C. AV paced
D. atrial fibrillation with mostly ventricular paced complexes

2. During exercise, the telemetry monitor displays this rhythm. You would:

A. Obtain a 12 lead EKG and notify the cardiologist.
B. Not allow the patient to exercise
C. Ask the patient if he took all his medications today
D. Take no action as the pacemaker is sensing and functioning appropriately

The patient progressed well in the program reporting an increase in functional capacity and ADL’s as well as incorporating changes in diet decreasing sodium intake. On visit 18, the patient presented c/o feeling “tired” and mildly dizzy. He had been to his cardiologist the day before and everything was “fine”. He stated he had discussed the pros and cons of novel agents for anticoagulation but there were no medication changes. Initial telemetry revealed usual atrial fibrillation with ventricular pacing.
The patient proceeded to exercise with caution and the monitor strip below was noted seven minutes into exercise at usual workloads. The patient reported feeling "fine" but was diaphoretic and he "never sweats." BP 120/60 mmHg.

3. What is your assessment of the patient and this rhythm?

A. The pacemaker is working as designed and the patient is hemodynamically stable.
B. The cardiologist needs to be notified and the pacemaker needs to be interrogated
C. The pacemaker must have "beeped" and the patient missed the warning
D. All of the above: A, B, and C
E. None of the above
F. Only A and B

This patient was seen at the cardiologist the next day. His pacemaker was working as designed but battery was at ERI. Based on pacer dependence, he was scheduled for a semi-emergent generator change. Since he was 3 months post PCI with bare metal stent and needed generator change and was anticoagulated, aspirin was held for a week and three days post generator change to reduce risk of local bleeding. He continues to progress in cardiac rehab.

Answers:
1. The correct answer is D. The patient has a history of chronic atrial fibrillation and initial resting strip demonstrates atrial fibrillation with mostly ventricular paced complexes.

2. The correct answer is D. Pacemakers replace or control the heart's own electrical activity. The primary purpose of a pacemaker is to maintain an adequate heart rate, either because the heart's natural pacemaker is not fast enough, or there is a block in the heart's electrical conduction system. The most basic form monitors the heart's native electrical rhythm. When the pacemaker does not detect a heartbeat within a normal beat-to-beat time period, it will stimulate the ventricle of the heart with a short low voltage pulse. This sensing and stimulating activity continues on a beat by beat basis. From this the basic ventricular "on demand" pacing mode is VVI or with automatic rate adjustment for exercise VVIR - this mode is suitable when no synchronization with the atrial beat is required, as in atrial fibrillation. When a pacemaker is set to VVI it is only interested in the ventricle. It watches to see if the bottom part of the heart 'beats' when it should and on the occasion that it doesn't 'beat' then the pacemaker will send a pulse down the lead and make it contract. This is great in people who have atrial fibrillation as there is no structured beating in the top part of the heart for us to be interested in…it is fibrillating. VVIR allows the heart rate to respond to exercise by increasing.

3. The correct answer is F. The pacemaker is working well and the patient is hemodynamically stable. The cardiologist needs to be notified and the pacemaker needs to be interrogated to determine remaining battery life. The heart rate will be fixed at a manufactured set rate when the battery life drops below the elective replacement interval (ERI). ERI usually means the device is getting low on battery but there is still energy left for several weeks or months. EOL stands for End of Life and that means the device should be changed out much sooner.

C is incorrect because Implantable Cardiac Defibrillators (ICD's) are the only device that will beep. There are no pacemakers currently on the market that will beep for any reason. Pacemaker and defibrillator combinations will also beep as long as it has a defibrillator component in the device. The most frequent cause of beeping is that the device is nearing the end of battery. Depending on the device manufacturer, the device may have anywhere from 2-6 months of battery life left when the beeping first sounds.

MACVPR membership currently includes 83 members. Our half day January meeting was held at Emerson Hospital on Tuesday afternoon. A recent survey indicates a majority of members prefer meetings in the Framingham-Metro West region. Most members also prefer a morning meeting. I am pleased to announce the next meeting will be returning to Speen Street at the American Cancer Society building, right next door to our previous facility.

In preparation for the October 2014 Symposium we polled members about their interest in traveling to Cape Cod for a conference. In the end it was decided we would return to the Devon’s facility for 2014. At our May meeting we will again poll members regarding an interest in a “destination” style symposium for a future event.

The MACVPR committee is always looking for speaker ideas and topics. Networking and sharing program ideas is a vital part MACVPR’s mission. The January meeting included tips for preparing for joint commission. I was able to take the information back to my program at Falmouth Hospital and share it with my co-workers. Two weeks later joint commission was in my department reviewing charts, talking with staff and pulling my employee file. I was glad I attended the meeting.

Melessa Fox, RN, BSN
Falmouth Hospital Cardiac Rehab
Membership Chair membership@macvpr.org

MACVPR Forum Update

Currently we have recent posts on these topics:

- We are currently looking to update our strength training in CR and PR to include more core strength and balance. Our pts currently have issues with correct form with exercises too. Is anyone currently doing these exs?
- For any programs combining CR and PR, was wondering if they all do the same routine in the gym at their own level, or do you provide something different for either group? Any suggestions would be helpful
- 24 RN position available at Holy Family Hospital
- Does any facility have supervising MD sign daily CR notes? Is this a requirement?

Everyone reading this newsletter should take a moment soon and sign on and see if they can offer any advice/answers to the posts. The more people that contribute, the more vibrant our forum will be. Try to make it a habit to check out the Forum at least once a week. If you subscribe to the topic when a new post is posted you are automatically sent an email alerting you to go to the forum to read the new post. So easy to track! This is a great but under-utilized resource...so please start to take advantage of it. Sharing our thoughts and experiences with one another helps all of our programs improve the care we provide to our patients.
Day on the Hill (DOTH) 2014
March 13-14, Washington DC.
Consider joining your colleagues and let your voice be heard in Washington! Visit with your Congressmen to share your views on healthcare and in support of our CR and PR programs.....it’s a great feeling to be heard!
Currently Karen LaFond, Kate Traynor, and Wayne Reynolds are planning on attending.
Please email admin@macvpr.org if you have any questions or interest. It would be great if people want to travel together, get dinner together or possibly share a room.

AACVPR Updates

Upcoming Webcasts:
March 24, 2014  Medicare Regulations for Cardiac & Pulmonary Rehab– 2014 Preview  Randall Thomas, MD FAACVPR
April 24, 2014  Individual Treatment Plan: Answers to the Top 10 questions  Bonnie Anderson, MS and Gayla Oakley, RN, FAACVPR

Ongoing:
Program Leadership in the New Era (PLINE) virtual Conference: 8 Great Speakers, 7 Great Topics, 1 Power-Packed Program!

April 28—May 1, 2014  AACVPR & UW-La Lacrosse Collaboration Comprehensive Cardiac Rehab Workshop

AACVPR Innovation Award

The Innovation award was designed to recognize a program that used outstanding creativity in patient care and program design to maintain excellence and expand services today and in the future.

The 2014 Innovation Award process will be a bit different than it has in the past. Each affiliate will host its own regional competition, with each regional winner representing the affiliate in the national contest. Stay tuned for more information which will be coming this month.

Pulmonary Rehab Week
March 9-15, 2014
Education Updates

The January 28, 2014 meeting held at Emerson Hospital had a small but engaged group of 17. The two hour meeting included a panel discussion with Kate Traynor discussing the CMS proposal for Heart Failure coverage in 2014 for cardiac rehab programs; Ginny Dow shared her program’s recent experience with a joint commission visit (see separate article on page __), and Wayne Reynolds led a discussion on the latest in reimbursement issues. The organization has been looking for a new “home” for our meetings since the AHA moved from Framingham, and once this is established, the return of speakers with CEU’s becomes an easier task as there is a 60 day lead time required to apply and the location and date are paramount before contacting speakers.

The next meeting is scheduled for May 22 at the American Cancer Society, which is located next door to our previously held meetings at the American Heart Association. We will determine after this meeting if this should be our new “home”, so please attend and give us feedback. We are working on two speakers and networking for a meeting from 8am to 12 noon.

The Education Committee always welcomes your suggestions for topics and speakers, and also would welcome any new members to join us. Currently we have 4 members: Ginny Dow and Deirdre Proudman; Co chairs, Margo O’Malley RN and Belle Florek PT.

Respectfully Submitted,
Ginny Dow RN, BSN, BC
Deirdre Proudman MSN, RN-BC, CCRN

Tales from the Trenches

The Emerson Hospital Cardiac Rehab shares their experience with a Joint Commission Visit

On November 14, 2013 we had the pleasure of a 45 minute visit with TJC. Since the tracer method system of review, we had not been directly visited (but always prepared) for many years. I would like to point out that I prepared for this by letting my administrators know the times we would be available to meet a joint commission reviewer as we do not have staff to “sign off to” in order to leave a session and answer questions. I believe it is acceptable to say that patient safety comes first, and if there are only two staff with 10 patients, and patients on telemetry, then the reviewers need to come back when you are free. I got the call in the morning that they were visiting us, and we were happy to be able to “show off” our great program and would like to share some of the questions we were asked. The physician said, quite seriously, “I know nothing about cardiac rehab, can you tell me something about how a patient gets into this program?” I was told to: “only answer the question asked and keep it short and simple”. He asked for three Medicare charts from patients who had done at least 3 sessions and then asked to see the problem list (which I know needs to be on the same “page” as the medication list, ours is front and back) and looked to see if all the medications listed had a corresponding problem noted on the front. He asked to see the short and long term goals, and since our ITP lists patient goals, I showed him this but he insisted he still needed a long term goal. I was able to produce our patient intake questionnaire where the patient lists their overall long term goal for the program and he was satisfied with this. He asked ‘who is on your staff” and wanted to know briefly what each person’s role was for the team. He asked “what is the turnaround time for physicians to sign telephone orders in your facility? (Ours is 48 hours) and he asked what is the dry time for gym wipes for equipment (ours is 10 minutes, we clean at the start of each class and there is more than 10 minutes before the next patient uses the equipment) and he was satisfied with this. He wanted to know if the refrigerator was for patient or staff (ours is staff). He asked “who is the doctor immediately available for emergencies” (this is how I know he was familiar with cardiac rehab) and I produced (from our code cart notebook kept on the cart) the monthly list of covering hospitalists showing which doctor was covering at that time and he was satisfied with this. He asked to see the Policy and Procedure manual but did not open it (I think they are good at reading body language, always remain calm and confident).

He looked at facility issues and we had to correct a few items: we had two oxygen tanks and he wanted us to indicate with a wall sign “FULL” or “EMPTY” and then place tanks accordingly (which we have done) . Second change we were required to make was involving our code cart, which is checked every morning and has a lock but he asked if there were any times that anyone was ever present without staff there and our housekeeping cleaners came in evenings after we left. He told us we had to lock the cart in an office, but our solution (so we would be able to keep clean offices :) ) was to change the time our cleaning occurred and now they come when the team is present (which solves other problems as well, now we can get to know our cleaner and point out areas they may have missed :) )!

I believe the TJC visit is a good opportunity to show off our programs and all the good work done, so I pointed out an article in November Heart Insight one of our patients wrote on the benefits of cardiac rehab and gave him a copy. Then as he was leaving I introduced him to the patient as she was just showing up for a maintenance class. He was quite happy to meet the author and took the Heart Insight with him!

Please feel free to call me with any questions. I also have a tracer tool produced by our Joint prep team that lists questions asked at a recent cardiac rehab visit at another facility that I can share if anyone would like this. Send me an e-mail and I can forward vdow@emersonhosp.org.

Respectfully submitted,
Ginny Dow RN, BSN, BC
Mindfulness: What it is and What it isn’t

"Mindfulness" seems to be the buzz word of the day. From the cover of Time magazine to the New York Times and Wall Street Journal, mindfulness continues to emerge as a well researched and effective tool for increasing focus and concentration, while also having a beneficial effect on perceived stress, blood pressure and the immune system. As more patients and families begin to hear about mindfulness in the media they may seek guidance from healthcare professionals on what mindfulness is and what it isn’t. Do you know enough about mindfulness to offer advice?

Here are some common questions and answers about mindfulness to share with your patients:

What is mindfulness? Mindfulness is a process of intentional attention and observation of the present moment, without judgment.

Is mindfulness a religion? No, mindfulness is not a religion, it can be practiced by those with or without a spiritual tradition. Mindfulness does not include incense or chanting or adhering to a religious dogma. While the roots of mindfulness are based in eastern-religious meditation practices, the current use of mindfulness in health care is a bio-psycho-social model of evidence based practice.

Is mindfulness the same as meditation? Mindfulness is only one form of meditation. Meditation can be taught through skills based training and practice. Mindfulness training is often called Mindfulness Based Stress Reduction (MBSR), which is an evidence based program pioneered at the University of Massachusetts Medical School by Jon Kabat-Zinn in 1979. It is currently the most researched of the mindfulness meditation programs available in the United States.

What is the difference between relaxation and meditation? According to recent studies of the brain, meditation, specifically mindfulness meditation, stimulates different regions of the brain than relaxation. Additionally, some small studies have suggested that mindfulness meditators may have beneficial structural changes to the brain. These changes become evident in as little as 8 weeks of a daily mindfulness meditation practice (Lazar et al. 2011).

Do I need to be able to sit on the floor to practice mindfulness meditation? Absolutely not, many people meditate in chairs, walking, standing, or in a reclining position.

What will I notice with mindfulness? First, you will notice how hard it is bring the mind to the present moment, as we tend to move between the future (our constant "to-do" list) and the past (our rumination space). The ability to intentionally and non-judgmentally bring the mind to the present moment for a specific period of time is the skill that is developed in mindfulness training. Secondly, you may notice that mindfulness does not necessarily equal relaxation. While relaxation is helpful to drop into mindfulness, relaxation is a passive process while mindfulness is an active process. You will be working your mind during your mindfulness meditation time in a similar way to how we work our muscles at the gym.

How do I learn mindfulness? We can begin to practice mindfulness simply by relearning to pay attention to the present moment. Babies and toddlers and even our pets are very mindful, it is something that is often lost as humans in our society get older. Some suggestions to redevelop mindfulness may be to stop and notice the color, fragrance or texture of a flower or the taste of a particular food. Pausing in the midst of a workday to notice your body -- where do you feel muscle tension or looseness? These are informal practices of mindfulness that lead to a greater familiarity of simply being. For a more complete mindfulness meditation practice, periods of stillness or formal meditation are added. These can be as short as 5 minutes leading up to 20-30 minutes of meditation practice per session. Generally, at least one 20-30 minute meditation period per day is recommended.

What resources are recommended when beginning a mindfulness practice? While learning and practicing mindfulness is simple it is not easy. Mindfulness is also not a quick fix and requires sustained practice to gain health benefits. It is often helpful to have a trained mindfulness teacher as a guide when embarking on a meditation practice. While books are helpful they often need to be supplemented by guidance from an experienced teacher. The Center for Mindfulness in Medicine, Health Care, and Society at the University of Massachusetts Medical School maintains a worldwide directory of nearly 1000 mindfulness meditation teachers http://w3.umassmed.edu/MBSR/public/searchmember.aspx These teachers typically teach Mindfulness Based Stress Reduction (MBSR) in 8 week group sessions, although some mindfulness teachers also work individually with students.

While not taking the place of a trained mindfulness teacher, there may be a place for digital tools to help develop and maintain a consistent meditation practice. Digital technology can be used consciously and effectively as an adjunct in developing the ability to drop into the present moment.
Is it possible to receive adequate protein from a vegetarian diet? What other vitamins should be considered when planning to become a vegetarian?

YES, you can receive adequate protein from a vegetarian diet that is balanced and full of nutrition. The hard part is maintaining consistency with all of these plant based foods to maintain vital nutrients needed to maintain a healthy diet. The average adult needs 0.8-1.0 grams of protein per kg of body weight per day. For example, a 130 pound female (59 kg) would need an average of 47-59 grams of protein per day. This may vary based on physical activity levels. Once this is determined one would have to take a look at the various types of vegetarians and the foods consumed within each plan.

The lacto-ovo-vegetarian diet seems to be the least restrictive in foods. Most plates will include dairy, eggs, legumes fruits, soy, vegetables, grains, nuts and seeds. Foods avoided would be meat, poultry, and fish. Some individuals may include fish which is a personal choice.

The middle of the road vegetarian diet is the lacto-vegetarian. Foods consumed are dairy, fruits, soy, vegetables, grains, nuts, legumes and seeds. Eggs are avoided on this diet along with meats, poultry, seafood and pork. The most restrictive is the vegan diet. Vegan diets consist of fruits, soy, vegetables, legumes, tofu, grains, nuts, and seeds. Foods avoided are eggs, dairy, red meat, poultry, seafood and pork.

Lacto-Ovo-vegetarians and Lacto-vegetarians are much less restrictive in diet than the vegan diet but with proper planning and preparation an individual can take in 100% of their daily nutritional needs. Below are some sample sources of protein with respective portions to track intake.

- 1 cup of milk has 8 grams of protein
- 1 cup of soy milk has 8 grams of protein
- 1 cup of dry beans has about 16 grams of protein
- An 8-ounce container of yogurt has about 11 grams of protein
- 2 tbsp of peanut butter has 7 grams of protein
- 1 oz of cheese contains 5 grams of protein

Other sources of protein would be nuts, cottage cheese, eggs, cheese, tofu and other soy products. One way to ensure adequate intake is to aim for a serving of protein at each meal. Secondly, snacks can be a great way to integrate more protein with other essential vitamins and nutrients. Some balanced snack ideas could include a pairing of hummus with carrots or an apple with 1 tablespoon of natural peanut butter or a Greek yogurt with berries. These snacks incorporate fiber and protein which help to maintain a balanced healthy diet. Another way to stay in check with your diet is to use a food diary to track daily intake.

My fitness pal is a great application to use that can track overall calories, sodium, calcium, iron, fats and other items needed. This application will map out your diet and show where improvements can be made. It is an excellent tool to use for understanding how your diet measures up to the daily standards.

Beyond protein there are some other key vitamins that need special attention that are easily overlooked in the vegetarian diet. Iron, Calcium, Vitamin D, Zinc and B12 are common areas of concern and may be hard to obtain in a vegetarian diet depending on the type of vegetarian diet followed.

continued
Iron is used in the body to help form hemoglobin which carries oxygen to the body’s cells. Heme sources are found in animal foods and are easily absorbed by the body where non-heme sources (plant based) are not as easily absorbed. Including foods rich in vitamin C can aide in absorption. Non-heme sources of iron include quinoa, oats, fortified cereals and grains, potato, beans, lentils, tofu, spinach, kale, peanuts, pumpkin seeds, raspberries, blueberries, bananas.

Calcium is a mineral needed by the body for healthy bones, teeth, and proper function of the heart, muscles, and nerves. It is found in yogurt, milk, and cheese; other sources of calcium are fortified in soy, rice and oat milk, broccoli, bok choy, okra, mustard greens, beans, tempeh, grains, almonds and tahini. Calcium supplements may be needed if dietary consumption is inadequate.

Vitamin D aids in the absorption of calcium. Main sources are found in fortified milk, egg yolks, liver and fortified cereals and grains. The sun is another source if vitamin D and small amounts of exposure are considered healthy. Most individuals will need to take a vitamin supplement to maintain adequate intake.

Zinc is important for growth, tissue repair. It is most abundantly in oysters, crab, lobster, dairy, red meat and poultry. Other good plant based food sources include beans, nuts, whole grains, fortified breakfast cereals.

B12 is needed by the body for normal red blood cell formation, neurological function, and nerve function. It is mostly found in animal products such as fish, meat, poultry, eggs, milk, and milk products. Non animal resources include fortified breakfast cereals. Many vegetarians will need to take a dietary supplement to help meet these needs.

It is not a bad idea to meet with a registered dietitian in your area to better manage your meal plan and to aim for the balance necessary to be healthy.

Visit this website for more tips and ideas: http://www.choosemyplate.gov/healthy-eating-tips/tips-for-vegetarian.html

For more information regarding vitamins please visit: http://www.nlm.nih.gov/medlineplus/vitamins.html

Connections: Mind/Body/Spirit

Here are a few popular digital tools that can help in motivating and sustaining a mindfulness meditation practice:

- **Medivate** (free tools) http://medivate.com/

With the increased interest in mindfulness and meditation, those in the healthcare professions need to have an understanding of what mindfulness is and what mindfulness isn’t to guide our patients and their families in healthy decision making. I hope that you will explore some of the resources listed to gain a better understanding of this popular intervention for health and well-being -- and not only for our patients for ourselves as caregivers.

If you have any specific questions about mindfulness or meditation and how it is being integrated into healthcare settings, please feel free to contact me. As always, I love comments and feedback from readers. What topics of mind/body/spirit would you be interested in exploring in future columns? Let me know at pressler@StressResources.com

Pamela Katz Ressler, MS, RN, HN-BC is the founder of Stress Resources (StressResources.com) located in Concord, MA. Stress Resources specializes in stress management, holistic healthcare education, and health communication for healthcare providers, organizations, and individuals. Pam is a frequent speaker to local, national, and international audiences on topics relating to stress management, mindfulness, resiliency strategies, therapeutic communication, patient advocacy through social media, and holistic healthcare. She is a faculty member at the Tufts University School of Medicine teaching courses in pain research, education and policy, as well as stress management and mindfulness for healthcare providers. Pam serves on the board of directors of the Integrative Medicine Alliance. Pam’s CD, Opening the Door to Meditation, featuring tools of relaxation and meditation is available on StressResources.com and Amazon.com.
Please renew your membership

The following individual memberships have either expired since January 2014 or will expire before the next newsletter.

Please take a moment to renew now to avoid missing benefits such as announcements, updates and the “Members Only” section of the web site which includes the newsletter and on-line forum.

### Reminder:

The Executive Committee is still trying to fill the President Elect position for 2014. It is a great opportunity for you to get involved with your organization. Remember we always work together as a team.

Consider joining the EC… you won’t regret it!

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Membership Application

Or

Download application from www.macvpr.org

Name (with Credentials):

____________________________________________________

Mailing Address you want the card sent:

Home/Work (Please circle)

____________________________________________________

____________________________________________________

Work #:

Home #:

E mail: _____________________________

Profession:

Institution:

☐ Cardiac  ☐ Pulmonary

☐ New or ☐ Renewing Membership

☐ $100 Two year membership (Begins on the first day of the month joined and ends two years from that date)

☐ $25 for a One Year student membership

(Students must be enrolled in a minimal of 12 credits per quarter and provide copy of schedule with membership application.)

How did you learn about the MACVPR?

____________________________________________________

Are you currently a member of the American Association of Cardiovascular and Pulmonary Rehab (AACVPR)?

☐ Yes  ☐ No

If you do not want your email and/or mailing address shared with the AACVPR please check here ______

Mail check or money order to:

MACVPR  C/O Ann Stone

33 Oakwood Ave Falmouth, MA 02540

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