**Nutritional Impacts on Memory: You Are What You Eat...**

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Without a doubt, you have heard many people turn the phrase, “you are what you eat.” When considering what most of us eat on a daily basis, we might be astonished to know how true this statement is. The chemical properties of our dietary choices have direct and long-lasting influences on the physical status of our bodies. What may surprise some people, however, is the fact that the biochemical interaction between our bodies and our food choices significantly impact the effectiveness and efficiency of our brain functioning, particularly that which is involved in the process of memory.

Because cognitive functioning is linked to chemical reactivity within the brain, it stands to reason that effective functioning would likely stem from efficient fuel intake and balance. If it is true that we are what we eat, it behooves us to consider ways to improve brain function by grooming our dietary patterns more carefully. A healthy body brings about a healthy mind. But more specifically, well balanced diets bring about well balanced thinking and memory.

Many things occur within the aging brain that contribute to the decline of memory. Inflammation of brain tissue, imbalance of neuro-chemicals, and obstruction of productive blood flow are common products of aging that are known to impact cognitive functioning. Although these are unwelcome realities for most of us as our bodies age, there are several things that we can do with regard to our dietary choices that serve to protect and preserve the cognitive flexibility of our learning and memory over time. Planning and managing an effective diet can dramatically improve cognitive well-being.

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“Say good night to night eating” is the slogan for a new dietary supplement which purports to curb night eating and control body weight. As obesity rates have increased in our country, so has interest in products such as these that are targeted toward weight loss. Although Night Eating Syndrome (NES) was first described over five decades ago by Albert Stunkard, only recently has interest emerged due to the increases in obesity. A 1.5 percent prevalence of NES has been reported among the general population and the syndrome is believed to be more common among the obese. Persons with NES are believed to share common characteristics, such as difficulty sleeping, skipping breakfast, consuming most calories in the evening and a negative mood that worsens in the evening. As such, it has been described as a combination of three disorders: eating, sleep and mood.

NES is different from binge eating disorder, which is characterized by short extreme bursts of eating. Those persons with NES normally eat continuously throughout the evening and night. The triad of disorders that are believed to make up NES will be briefly outlined in the next few paragraphs.

- **Eating**

Night eaters have been found to consume a significant number of their daily calories after their last evening meal, often during nocturnal awakenings. Other characteristics include little or no hunger in the morning; therefore, skipping breakfast and lunch. Because those persons who exhibit characteristics of night eating often report a lack of control over evening eating and nocturnal eating episodes, researchers have sought to determine if NES contributes to obesity and if so, to the severity of obesity.

In Lundgren and colleagues’ study of psychiatric outpatient clients, obese persons (BMI >30 kg/m2) were 5.2 times more likely to meet NES criteria than normal weight participants (2006). In another study of obese and non-obese persons with NES, the only difference found between the groups was a younger age of non-obese night eaters; furthermore, 52 percent of those obese persons with NES reported that night eating preceded obesity. This finding led the researchers to hypothesize that NES may lead to the later development of obesity.

- **Mood**

Geliebter has noted that NES is more than overeating in the evening and also consists of abnormal psychological states and hormonal problems. The combination of these patterns may reduce the efficacy of weight reduction.

Depression is the most common mood disturbance found among those with NES as researchers have found night eaters have higher depression scores and report lower self-esteem than non-night eaters. Lifetime substance abuse has also been found to be more likely among those with NES as compared to those without the syndrome.

Other mood disorders reported by those with NES include anxiety disorders and eating disorders. It has recently been reported that treating low serotonin levels may alleviate the symptoms of NES.

- **Sleep**

NES is also marked by sleep problems due to multiple awakening to eat each night. Persons with NES have more...continued on page14
The South Carolina Silver Haired Legislature was created in 1999 by the South Carolina General Assembly and signed into law by Governor James H. Hodges. The South Carolina Silver Haired Legislature held its first organizational session at the Capital Senior Center in Columbia on July 14, 1999. Gloria Bonali, Conway, was elected as the first Speaker of the unicameral legislature and the first SCSHL legislative session was held in the House of Representatives Chambers of the South Carolina State house in Columbia on September 14-15, 1999.

The unicameral body has 152 Representatives, all of whom are registered voters over age 60. Representatives are elected by counties on a ratio of one each per 5,000 South Carolinians over age 60.

The SCSHL was created by statute for the following purposes:
1. to identify issues, concerns, and possible solutions for problems faced by the citizens of South Carolina with special emphasis on issues related to Seniors;
2. to make recommendations to the Governor and to members of the South Carolina General Assembly;
3. to educate the public on Senior issues;
4. to encourage Seniors to participate actively in public affairs;
5. to function on a non-partisan basis;
6. to promote good government for all South Carolinians; and
7. to hold its SCSHL Legislative Session annually.

The SCSHL meets every September in legislative session to formulate the resolutions the will be presented to the South Carolina General Assembly and the Governor the following January. When the SCSHL assembly is not in session, governance is by the Board of Directors, a 26 member group that includes the officers, the caucus chairs, and one additional member from each caucus.

The ten caucuses work directly with the 10 South Carolinas Area Agencies on Aging. Interested persons may get in touch with the Caucus chair or the AAA in their area. The Waccamaw Caucus includes the counties of Horry, Georgetown and Williamsburg. The Waccamaw Caucus Chair is Kenny Bingham (Myrtle Beach), the Vice Chair is E. Holowacz (Myrtle Beach), the Secretary/ Treasurer is Henry Baranoski (Conway). Other members of the Waccamaw Caucus are Representatives Gloria Bonali (Conway), William Bridges (Loris), Shelia Cohen (Conway), Ted Cohen (Conway), Julia Hinkle (Pawleys Island), Judith Mattson (Little River), and Saundria Reynolds (Pawleys Island).

The top five 2006 Legislative Priorities are:
1. That the South Carolina General Assembly enact and the Governor sign legislation to fund a transportation program at an affordable fee for the elderly of South Carolina, regardless of financial status;
2. That the South Carolina General Assembly enact and the Governor sign legislation to require criminal background checks for all paid professional in-home and adult daycare service providers and their employees;
3. That the South Carolina General Assembly enact and the Governor sign legislation to coordinate with Medicare Part D to provide low-income South Carolina Seniors assistance with costs for Prescription drugs to cover the Medicare Part D coverage gap by making the State Pharmacy Assistance Program permanent, retroactive to January 1, 2006 (This legislation was passed by the South Carolina General Assembly and the governor signed the Bill into law on Thursday, February 23, 2006. The Bill is known as “GAPS”);
4. That the South Carolina General Assembly enact and the Governor sign legislation to increase state funding for in-home and community-based services for older citizens; and
5. That the South Carolina General Assembly enact and the Governor sign legislation that will provide increased statewide funding for necessary life-sustaining shelter, rent, and services needed to care for elderly abused victims who must be removed from their places of residence.

The Area Agencies on Aging play an important role in the ongoing local activities of the SCSHL. Each AAA

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The Coastal Carolina University Exercise and Sport Science (EXSS) Program began in January of 2008 with approximately 40 students. Since our last update to *PrimeTimes* a little over one year ago, we have seen 26 students graduate and are poised to have our biggest graduating class yet in Spring 2011. Based on the most recent numbers from CCU administration, the number of students majoring in EXSS has grown to over 380 students. Given the challenges the nation faces with the prevalence of cardiovascular disease, obesity and cancer and their connections to physical inactivity and nutrition, many exercise science programs across the nation have also experienced rapid growth.

The Allison Sloan Chandler Smith Exercise Science Laboratory, our centerpiece for teaching, research and community outreach, has been instrumental in the recruitment, retention and preparation of students to assess, design and implement exercise programs. Through the laboratory, students are able to get hands on experience with “state of the art” equipment used for measuring things such as muscle strength (“the Biodex”), body composition (the “Bod Pod”) and heart function (an electrocardiograph, or “EKG”). We strongly believe that exposure to these types of activities give our students good preparation for graduate study and future employment.

Our first two “EXSS Majors of the Year”, Maggie Gise (2009) and Tyler Gebauer (2010) are currently enrolled in Doctor of Physical Therapy programs. Gise is attending the University of Maryland Eastern Shore and Gebauer is attending the University of South Carolina. We also have graduates that have been admitted to graduate athletic training programs (Seton Hall University) and some who were offered employment almost immediately upon graduation (if not before) at facilities such as South Strand Cardiology (Myrtle Beach), the North Myrtle Beach Aquatic and Fitness Center, and Fitness Edge (Myrtle Beach). We can’t name them all, but the faculty members are very proud of all of our recent graduates and wish them the best in their future careers.

With regard to research, we have continued to present at regional and national scientific conferences for associations such as the American College of Sports Medicine (an unquestioned leader in our field), the American Public Health Association, the American Physical Therapy Association and the National Association of Sport and Physical Education. Will Lyerly has published a handful of research articles and book chapters over the past year, and our newest addition to the faculty, Lisa Barella has begun her research agenda involving exercise and cognitive function. Barella received her Doctor of Philosophy in Exercise and Sport Psychology degree from the University of North Carolina Greensboro. We are glad to have her expertise, drive and energy on board.

Future endeavors for the program involve the planned renovation of the Williams-Brice Building which currently houses our laboratory and classroom facilities. It is hoped that our laboratory space and capabilities will be able to expand to match the rapid growth of our student numbers. Other agenda items for the program are to complete an overhaul of our program web page, to begin the process of program accreditation and to maintain our research productivity. Thanks to all who have participated in our past research projects; your support has allowed us to get off the ground running. If you have interest in participating in future research studies conducted by the department, please e-mail us so we can describe any on-going projects. §

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Is 50 the “new 40”?  

I, for one, sure hope so! I was recently looking through a family photo album and came across a photograph of my dear, beloved grandmother. Years ago, she told me that she had posed for the picture on her 50th birthday. She looked beautiful...and yet somehow, I am pretty sure that at age 54, I enjoy a more youthful image when I look in the mirror, than my grand mom did. So next, I looked at a picture of my mother when she became a grandmother for the first time. She was holding my daughter; she was about 50. Her “joie de vivre” clearly apparent, she looked radiant in the photo. Yet every time my sisters or I visit, mother makes it a point to say that she cannot believe how young we look “for our age”.

Please don’t think I’m bragging about my looks because this is not unique to my experience. Many of my girlfriends recount similar experiences (and I am pretty sure that this phenomenon applies to our men folk too). Maybe the baby boom generation had better nutrition, and medical care than those who went before us. Maybe we were warmer in the winter, and cooler in the summer. Perhaps our lives were just that much more comfortable. In any case, those who study human lifespan project that, indeed, the baby boom generation will live longer than any other cohort in the history of the world.

The question is: “What quality of life will we enjoy as the years pass?” Will we be 50 and BETTER...or will we start down the slippery slope of physical demise? I think the answer, to a certain extent, is up to each of us. After all, each of us is the “captain” of our own ship! Barring unfortunate genetic predisposition, or unexpected accident, we can chose to build a plan as to continue on the path to healthy aging. We have choices. We can choose to eat nutritious foods, limit vices, hydrate ourselves, see our physician, love with all our hearts and serve a mission with passion. Most importantly, we can chose to do what the human body was designed to do – MOVE!

I’d like to invite you to MOVE with your community! On Friday, April 1, 2011, Coastal Carolina University will open its beautiful campus to the community for the
Are you fed up with being sick and tired? Do you need assistance starting an exercise program? Do you want to feel fully present, energized and alive? Would you like help jump starting your weight loss initiative? Do you want to be accountable and motivated as you pursue your goals? Are you ready to make those long-term health changes you have struggled with for so long?

If you answered “YES” to any of these questions you may want to consider wellness coaching. Wellness coaches help individuals reach optimal health by guiding and supporting clients through behavioral change. Additionally, the certified coaches help clients move from the place where they are struggling, inefficient or dissatisfied to a place of positivity. Positive habits, a new way of thinking and celebration of daily successes become embedded in one’s new way of being in the world. Wellness coaches are able to work professionally with clients and coach them on nutrition, physical activity, stress, weight management and other wellness topics.

Wellcoaches® Corporation defines wellness coaching as “a close relationship and partnership with a coach, providing structure, accountability, expertise and inspiration to enable an individual to learn, grow and develop beyond what she or he can do alone.” Wellcoaches® Corporation, which was founded by Margaret Moore, is setting the gold standard for wellness coaching through its strategic partnership with the American College of Sports Medicine and its 4,000 trained coaches. “Working on one’s wellness is a complex, intertwined affair and not easy to unravel alone when you’re dealing with a few things, not sleeping, lots of stress, not eating well or not exercising,” Moore said. “It’s a tangle of things that coaches can help clients unravel beautifully and find a new path forward.” When searching for a coach, look for a Wellcoaches® certified professional who also has a background in a health or fitness related field. Wellness coaches will usually specialize in a couple areas of wellness and will only give advice in their areas of expertise. Therefore, if you are interested in starting a physical activity program, look for a coach with a background and certification in exercise science and personal training or fitness instruction.

What is the coaching process?
Coaching can occur by telephone or face-to-face depending on the location of the coach and client. First, a wellbeing assessment is completed which informs the wellness coach about the client’s priorities and any health related concerns. Through this process the client develops increased self-awareness. During the first coaching session, the wellbeing assessment is reviewed and discussed and together the coach and client develop a personalized vision and three-month goals. Further, a coaching contract, as well as expectations of the coach and client are defined and developed. Weekly goals are set and subsequent sessions can occur weekly, bi-monthly or monthly. At each session, successes are celebrated and key obstacles are explored and resolved. Most choose to receive coaching for a minimum of three months as that provides the appropriate time frame to set realistic goals.

What can I expect from a wellness coach?
Your wellness coach will:
• listen to you without judgment and accept you where you are
• assist you in creating your future vision
• help you develop specific short-term and long-term goals
• assist you as you develop a plan of action
• hold you accountable during your regular meetings
• help you develop the skills that will enable you to sustain behavioral change

How does wellness coaching work?
Certified wellness coaches use theory and best practices to guide the coaching process. The transtheoretical model of behavioral change, social cognitive theory, positive psychology and SMART goal setting provide a theoretical foundation for the wellness coach.

Using the transtheoretical model of behavioral change, coaches will match the treatment or intervention strategy to the client’s current stage of change. This increases the likelihood of success for the client. During the assessment process, the wellness coach and the client work together to determine the current stage of change and the client’s willingness to change. Together, the coach and client will decide which areas to prioritize. Over time, successes in one area, along with insight, will encourage change in most areas.

Bandura’s (1986) social cognitive theory proposes that the interaction of personal, environmental and behavioral factors predict behavioral change, with self-efficacy being the strongest predictor. Self-efficacy is task and/or situation specific and is determined when one is able to successfully accomplish or complete a specific task or behavior. As self-efficacy increases, confidence to complete a task increases, and future attempts at this task are then repeated. A wellness coach will encourage increases in self-efficacy by suggesting setting goals that are attainable and celebrating small successes.

Martin E.P. Seligman and The Positive Psychology Center at the University of Pennsylvania state that positive psychology is “the scientific study of the strengths and virtues that enable individuals and communities to thrive”. Past (contentment), future (hope) and present emotions (flow), along with positive traits (wisdom, love, courage) and positive groups (altruism, work ethic) embody positivity. Coaching helps broaden one’s mind, build curiosity, instill a willingness to explore new ideas and ways of thinking, and build resilience as one faces and overcomes life’s challenges.

SMART goal setting requires that one set specific, measurable, attainable and/or action-oriented, realistic, and time bound goals. Goal setting encourages clients to set a vision for where they see themselves in the future. This helps guide one as they work hard toward pursuing their goals. When days becoming challenging or feel insurmountable, having a set of goals can be a strong reminder of where one wants to go, while also providing motivation to work through a sticking point.

I have a chronic disease. Can wellness coaching help me?
Daily struggles with a chronic disease can feel overwhelming and stressful. A wellness coach can help the client find their hidden strengths to overcome the pain, discomfort and frustration, while also providing motivation for the client to find strength and peace within the suffering. Recent research on chronic disease patients has shown a positive relationship between wellness coaching and disease risk prevention, wellness coaching and quality of life, and wellness coaching and physical activity behaviors.

The Coaching Patients on Achieving Cardiovascular Health (COACH) program was designed to help patients achieve cardiovascular health, through the use of coaching (by dieticians and nurses) versus medication prescription. A multicenter controlled trial with 792 patients randomized patients to the coaching program plus usual care group or usual care alone group. After the 6-month intervention, the coaching program plus usual care group had a significantly greater change in their total cholesterol when compared to the usual care alone group.

Longitudinal benefits of wellness coaching for cancer survivors were observed in a cohort of 30 cancer survivors. This study assessed immediate and long term benefits of coaching sessions on depression, anxiety, quality of life and exercise stage assessment. Significant improvements were observed during the three-months of wellness coaching, while positive trends occurred during months three to six. There was a slight decline in the observed outcomes during months six to 12, but their levels never returned to baseline.

The Active for Life study, which was funded by the Robert Wood Johnson Foundation, was conducted over four-years at 12 sites. Active Choices, a six-month telephone based behavior change program, or Active Living Every Day, a 20-week physical activity intervention, was delivered in small groups to older adults (average age of 65.8 years). Significant increases in moderate- to vigorous-intensity physical activity, total physical activity and body...continued on page 14
The trend of using technology-based interactive games (e.g. video games) to increase physical activity and fitness levels is well documented in both popular and scientific literature. Indeed, active gaming is becoming more visible by its use in K-12 schools, recreation centers, rehabilitation clinics, public and private fitness facilities and retirement homes. Many folks have or are considering using gaming technology as part of their physical activity or fitness programs. At Coastal Carolina University, we have recently developed a new active gaming facility designed to meet educational, recreational and research objectives for individuals of all ages.

**What is Active Gaming?**

Active gaming is most simply defined as the joining of eGames (electronic or video) with physical activity, and is an umbrella term consisting of two forms of eGames: **Exergaming** and **Interactive Fitness**. Exergaming are games that involve a screen and/or video game play, and is associated with participants becoming “human joysticks” as they must move their bodies instead of just their thumbs in order to play the games. Interactive fitness activities are active games that do not involve a screen, yet still involve physical activity and eGame play (Hansen, 2010). Exergames include games such as dance games (e.g. DDR), virtual game bikes (e.g. CatEye Gamebikes), virtual sport games (e.g. Nintendo Wii & Xavix), and Balance board simulators (e.g. XrBoard). Interactive fitness activities include martial arts simulators (e.g. 3Kick & Makoto), Light Space, Sport Wall or Hops Sports systems. Exergaming methods generally fall into one of five categories: control, rhythm, machines, workout and sensory.

**Why Exergaming?**

Technology has become a fascination to both children and older adults in the 21st Century. Our culture has changed and televisions, computers, iPods and video games have taken over the lives of many youth, and have become important to older adults as well. Indeed, we have a “gamer generation” and it has changed our environments, workplaces and playplaces. We may not fully appreciate the gamer generation. As teachers, we might say students these days have a very short attention span, but these same students will play video games for hours. Eighty-three percent of American children between the ages of eight and 18 have one or more video game consoles (e.g. Xbox, Playstation, Wii). The video gaming industry recently bypassed box office sales with over 12.6 billion in sales. In 2008, 26 percent of Americans over the age of 50 played video games, an increase from nine percent in 1999. The average gamer is 30 years old and has been playing for 13 years. Gaming participation continues to rise drastically while fitness and physical activity levels have declined. Recognizing our cultural shifts and trends, we realized that the key is NOT to view video games as a reason for increased obesity, but as a tool to increase fitness levels in video playing individuals. Part of our educational responsibility is to align our efforts in creating healthier lifestyles with our society and culture, and meet individuals “where they are” in their current interests and lifestyle.

Exergaming advocates argue that active gaming turns otherwise sedentary individuals (couch potato video gamers) on to physical activity and improves their health and fitness. Exergames increase motivation by aligning with current interests of participants and harnessing the fun factor that comes from exciting challenges and games that match participant levels. Exergaming aligns with the notion that videogames are very intrinsically motivating, as they offer individuals the “5 Cs” of control, challenge, curiosity, creativity and constant feedback. This of course is preferred over the more usual extrinsic motivators. This motivating and health enhancing physical activity has the potential to promote exercise adherence compared to traditional exercise (which many may view as a chore). There are common reports from individuals that do not like to exercise, but do enjoy playing exergames. As an alternative form of exercise to curb negative obesity and fitness trends, exergaming is a tool that deserves a place in physical activity programs and facilities.

**What does the Research Say?**

There are mounds of anecdotal evidence in support of active gaming, but scientific research on exergaming has only recently emerged. Current research centers around the debate of whether or not exergames provide the
recommended daily rates of physical activity, reduce obesity rates or improve the overall health of individuals. Thus far, the overall scientific consensus is that exerging is a viable physical activity/exercise option. Of course, like any form of exercise it may depend on mode and type of activity. With sport games like Wii, the general conclusion is that there is physiological benefit, though the general energy and caloric expenditure is slightly lower than participating in the actual sport. For some fitness games such as the popular Dance Dance Revolution (DDR), research data indicates some DDR modes are comparable to many other aerobic activities and results in significant weight loss if used regularly. Recent research reporting positive psychological benefits such as self-esteem, absenteeism, adherence, confidence and motivation is also encouraging. Exerging research has increased dramatically in recent years, with all indications it will continue to do so. And the active gaming industry is specifically designing future games and technology to promote physical activity. As a result, we will increasingly be able to manipulate this form of exercise to maximize health benefits just as we manipulate more traditional forms of exercise.

What Can Exerging Do for Older Adults?

A common perception is that exerging is an activity for teenagers. The truth is that seniors have been playing virtual fitness games at retirement communities for years. Older adults are now competing in virtual boxing matches, dance tournaments and bowling leagues. Although initial gaming technology was predominantly geared toward the younger populations, newer games make it an activity that all ages can enjoy and derive benefits. Retirement communities are dedicating entire rooms to active gaming and according to the International Council on Active Aging (ICAA), more retirement centers plan to buy a gaming system than traditional cardiovascular equipment over the next two years. Recent research evidence supports using active gaming is helping older adults sharpen their minds, strengthen their bodies, and lift their spirits. According to scientific research findings, exerging can:

• effectively facilitate weight loss in sedentary and overweight individuals ages 66 and 72.
• significantly improve postural stability and decrease risk of falls in older individuals.
• significantly improve mood and mental health-related quality of life and reduce depressive symptoms for individuals ages 65-94.
• help stroke recovery patients gain significant arm strength compared to less active therapy.
• produce similar physiological effects as traditional treadmill exercise across all age groups.
• yield greater levels of interest and enjoyment compared to traditional exercise.

Of course these findings are encouraging. Given that approximately 40 percent of individuals ages 70 and above do not participate in any significant physical activity, this population faces growing health challenges. Any opportunities that can increase personal fitness, enjoyment and motivation, and access to physical activity should be welcomed. At Coastal Carolina University, we have developed an exerging laboratory for these reasons, and to engage individuals of all ages.

What is in Coastal’s Exerging Lab?

Our exgame lab features a wide variety of video gaming equipment that can be used by almost anyone regardless of age. The games can be customized for all skill and fitness levels. This equipment includes:

• Cateye recumbent exercise bicycles This enables the person exercising to play a variety of acceleration games while peddling on the bicycle. Speed, distance and resistance can be controlled by the person in order to customize their workout. Specific health benefits from this machine include eye-hand coordination, cardiovascular endurance and lower body muscular endurance.
• Dance Dance Revolution A popular arcade game, this activity incorporates dance as part of your exercise routine. The player chooses the type of song, beats of the song and can even play in workout mode to get an estimate on steps taken and calories burned. Specific health benefits from this machine include eye-foot coordination, balance and cardiovascular endurance.
• XRboards These are controllers in which you stand on and play games that require balance and core strength. Skateboarding, snowboarding and surfing activities can be replicated by using this piece of equipment.
• Treadwall Looking for a different workout? The treadwall is a rotating climbing apparatus that allows the user to receive all the benefits from climbing without the need for a mountain. With no motor, the user dictates the speed of the wall and the pitch of the wall (+5 to -20 degrees) to suit a wide variety of users. Benefits include cardiovascular endurance, muscular strength and muscular endurance.
• Xavix This is a console similar to Playstation and Xbox but with a different twist. All games played through Xavix involve physical activity by using sensors on the console and the equipment the player uses. Boxing, eye-hand and J-mat games are action packed and can increase your heart rate as well as improve your eye-hand coordination and eye-foot coordination.
• Nintendo Wii Perhaps the most familiar exerging equipment, the Wii has several options for users including the use of a balance board for several games. From casual recreation games (Wii Sport, Wii Resort) to games that are specifically designed as an exercise program (Biggest Loser, EA Sports Active) the Wii can meet anyone’s needs in regards to increasing physical activity and improving all aspects of physical fitness.

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The following are some suggestions that make memory management more effective through nutritional choices:

• **Reduce Your Calorie Intake**
  Studies have shown that when caloric intake is more significantly balanced with energy output (i.e., exercise) the hormone ghrelin is released in the part of the brain that facilitates memory. Believed to be a function of calorie reduction, rather than exercise, this hormone appears to facilitate and regulate more efficient connections among the neurons in the brain, thereby causing learning and memory to occur with more relative ease and efficiency.

• **Avoid Eating Fast Food**
  Dietary choices that are extremely high in saturated fat, sodium and processed sugar – such as most fast food menu items – are known to contribute significantly to carotid artery disease. As a characteristic of this disease process, the carotid arteries become clogged with fat deposits, and oxygenated blood has a more difficult time reaching the portions of the brain where thinking, speech and memory occur. Studies have shown that older adults whose diets include high numbers of food choices from fast-food and other processed sources are significantly more likely to develop memory problems than their peers who eat more balanced and healthy diets.

• **Consume Antioxidants**
  The body naturally produces oxidants, which are harmful compounds. But some foods have been shown to be effective in breaking these down with naturally occurring chemicals called antioxidants. When antioxidants are introduced to the body with regular frequency and dosage, general brain functioning is observed to increase. Memory, processing speed and rapid language recall are common examples of the cognitive benefits that the brain is believed to receive from regular inclusion of antioxidants into the diet. Examples of foods containing helpful levels of antioxidants are fish, eggs, most berries, bananas, avocados, dark green vegetables and most wines.

• **Reduce Alcohol Intake**
  Drinking alcohol in excess has been shown to negatively impact brain efficiency and functioning. Alcohol is known to impede the natural chemicals in the brain – called neurotransmitters – that regulate rates of learning, memory, judgment and decision-making. Because smaller and less frequent doses of alcohol are associated with less disruption in those areas, limited intake is recommended for older adults who are concerned about preserving the functions of memory and learning.

• **Eat Like the Greeks**
  Surprisingly, diets that resemble the menus from Mediterranean restaurants are known to contribute to more efficient brain functioning, specifically with regard to memory and information-processing. Larger and more frequent increments of fish, vegetables, fruits, cereals and legumes within the diet are considered brain-healthy, as they contribute to the balance of insulin in the body, which in turn directly impacts inflammation and chemical regulation in the brain. Studies have shown that older adults who consume this type of diet are at a significantly lower risk of cognitive impairment.

• **Increase Vitamin B**
  People who increase their intake of folic acid along with vitamins B12 and B6 are known to improve both recall and recognition functions of the memory system. Studies have shown that both the intensity and the duration of memory are impacted by this vitamin intake profile.

• **Remember to Drink Water**
  The hydrating properties of water are excellent sources of memory preservation. Because the brain is water-based in its physical composition, its chemical and electrical functioning depends on hydration. When the body becomes dehydrated, efficiency of learning and memory are known to be compromised. People who keep their bodies well hydrated are those who are at lower risk of stroke, memory loss and/or neuromotor impairments.

  A well-planned diet can aid memory function with regard to longevity as well as intensity. It is important to speak with your physician or dietician to obtain information about a dietary plan that is most pertinent and beneficial to you as an individual. Each person’s body expresses dietary needs in highly individual ways. Therefore, it is unlikely to find a “one size fits all” dietary plan for increasing cognitive function. Consultation is important.

  For further research and investigation on this topic of dietary enhancements for learning and memory, readers may wish to consult the following sources:


The air was cool and crisp and I couldn’t inhale enough of it this mid-October morning. I just loved this time of the year and today was a very special day. My older brother Harold drove my siblings and me into town for the Yam Festival Parade and I didn’t waste any time leaving the family pack to follow the crowd rushing to find the best viewing position. The parade entries were lining up – bands, floats, cars, horses, clowns, cars, tractors - the works - and I didn’t want to miss a thing! I rarely got to do fun stuff because there was so much work to be done on the farm and my parents thought a secular event like a parade was too worldly and a waste of time, but somehow we managed to get away and I was going to enjoy every minute.

Just as I was settling into a good spot, I looked around and in my face was the beauty queen float with the selected beauties stepping on for their royal ride in the parade. These town girls wore gorgeous strapless gowns with long white gloves and perfect hair, and all of a sudden I realized I would never look like that and I could never be a beauty queen. After all, I was a tenth grader and nobody ever nominated me for that dream list. Why was I so ugly and poor and my parents so old and ignorant? I wanted to be somebody important; I had always dreamed of riding in a big parade and waving to huge crowds. What southern girl hadn’t?

Right when my self-pity party was gaining momentum, I felt movement in the crowd and looked up to see a tall gentleman beckoning me. “Would you like to ride in the parade young lady?” he asked. In disbelief, I replied, “Yes, sir!” He then explained that he’d like me to ride on the front fender of his fertilizer truck in the parade. What? A fertilizer truck? As a farm girl, I knew all about fertilizer; I knew how it smelled. Would everyone laugh at me riding down Main Street in my hometown sitting on a fertilizer truck? Opportunity was knocking; the choice was mine.

I took a look at this huge truck loaded with 20,000 pounds of fertilizer packaged in 200 pound sacks with empty sacks attached all around for decoration. What a site! I jumped up on the front fender to face the world as the wheels began to roll. I pinched my cheeks to bring color and pushed up my stringy hair. I was too scared to wave at first but when I did the crowd waved back and embraced me. I couldn’t believe it! I flung the free small fertilizer notepads and the crowd grabbed them like candy. Wow, this was the best day of my life! They loved me! I was a queen (albeit a fertilizer queen) and I was riding in the Yam Festival Parade down Main Street in my hometown!

My dream came true and my dream maker sold fertilizer. He did not know me but he was scanning the crowd for a face that would poster his product. I had freckles, stringy wind blown hair, muscles that could lift a bushel of yams, and was wearing a chicken feed sack dress made by my mother. I was selected for who I really was – a farm girl, not a beauty queen. I learned there is more than one way to make dreams come true and we have to take risks to make it happen. I turned my disadvantage into advantage by seizing the opportunity when offered. It was a valuable lesson I still employ.

The fertilizer man, Al Williams, was also the mayor of Tabor City, North Carolina, my hometown (pop. 2000). When the city high school was celebrating its last reunion in the early 1990s, I was asked to keynote the event. Retired Mayor Williams agreed to be my guest. Without knowing why, he agreed to stand next to me while I spoke. I recalled the “fertilizer queen story” and how he made a dream come true for me many years earlier. The audience went wild! He had made dreams come true for them as well. We laughed and we cried!

Muriel O’Tuel had been assistant to the superintendent of schools in Horry County prior to her retirement and now spends most of her time speaking to a wide array of audiences. PrimeTimes is pleased to have her as a contributor and invites you to watch for future “storytelling.” She can be reached at Muriel O’Tuel Presentations at 843-249-6903 or at P.O. Box 509, North Myrtle Beach, SC 29597 or at muriel@murielotuel.com

Some people come into our lives and quickly go; Others stay for a while, leave footprints on our hearts And we are never, ever the same.

Flavia

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By Muriel Ward O’Tuel, Ph.D.
Education, Psychologist, Author

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When I Grow Up I Want To Be......continued from page 1

sister was the coolest because make no mistake, Linda is and has always been one heck of a classy dresser. Before her wardrobe transformed into the rainbow of scrubs that it is today, she shopped. I mean, really shopped, for her work outfits. Pencil skirts, tailored jackets and ankle strapped shoes, because, hey, she has great legs. When I was first entering into the working world, we'd spend hours at Linda's house going through clothes that I might be able to wear. There's just nothing like shopping in your sister's closet. Having served her first career in the banking industry, Linda's closet was forever packed tightly with suits, skirts, blouses and shoes to die for – many still tagged from the store where they'd been purchased – and she'd load up a bag and say with each piece she added, "This looks so good on you. You take it and wear it." I've often wondered if she bought some of those items with me in mind because she was right, they did look good on her little sister. I was the best dressed 20-something wherever I worked...and it was all because of my personal shopper, my sister, Linda.

Linda has always inspired me to dream and believe. For years, we've shared good books and many silly stories about our "one day." She helped me fill my hope chest with the little things she thought I'd like in my own house one day. That hope chest is just, well, so Linda. Linda's crafty. She's sewn every family member, young and old, a Christmas stocking to hang during the holidays. For years, on Christmas Eve, she filled them each and every one with various sundries from toothpaste and dental floss to Pop Rocks and Band-aids. She always filled mine with pot holders or trinkets with notes that read "This is for your hope chest...for one day." So, I'd stick them in there with dreams of what would one day be. We even bought the makings of a homemade baby blanket for a bouncing baby boy long before I was ever married...just because we liked it and we had the perfect place for it....in the hope chest. So, when the first baby came and she was named Emma, we saved that blanket. We left it in the hope chest for the one day. So, when God delivered Baby Boy Eli, life had gotten in my way, the busyness of the world had intervened. I was so zoned in on raising babies, being a good wife, and employee, that I forgot how to dream for myself. For a little while, I put wishing upon my own star on the back burner, and that wish of a finished Denim Teddy Bear baby blanket never came to fruition. Not too long ago, my children opened my old hope chest and pulled out everything it holds just because it's what little children do, right? They explore and discover, and there they found the makings of that perfect little boy baby blanket. And it hit me – Has my life gotten so busy that I've forgotten what my dreams actually are? Where does what I really want fall into this picture? I never made my little boy that Denim Teddy Bear baby blanket. Shame on me. I thought about that shopping spree, and I thought about Linda. Then it dawned on me. Is this how my sister once felt? Did she finally realize that it was now or never for her dreams? Were there a string of things she had wanted to do, yet had let slip through the cracks? All of a sudden, I began seeing Linda in a different light. What a strong and courageous woman. Not because she dedicated her life to the service of others. Not because she changed her life to be a more flexible and accessible mother and grandmother, but because she listened to her heart and heard it say, You've got one life. One story. Make the chapters read like You want them to read. As women, many of us never take that chance.

So, now when I look at my sister, I admire her even more. I take note of the things that make Linda Linda. And, I wonder if she knows how the decision she made that day, when she threw up her hands and said, I'm doing this! changed not only her life but inspired the lives of the young woman closest to her. So, for the record, my sister is poised. She watches what she says. She does her best to never hurt anyone's feelings and she can chew you out with a smile on her face. You'll walk away and not realize until days later that she was putting you in your place. She doesn't like to be surprised or embarrassed and certain things are done just because it's the right thing to do, simply for the principle of the thing. Don't try to catch her
The South Carolina Silver Haired Legislature assists the regional caucus with issues affecting South Carolina seniors and in the coordination of interests through development of resolutions to be presented at the annual legislative session in Columbia for discussion and confirmation. Regional caucuses meet throughout the year to prepare resolutions (similar to bills) to be distributed to six legislative committees. The members of the legislative committees discuss their resolution and finalize three from each committee for consideration at the September legislative session. The final 18 resolutions are discussed, voted upon and prioritized by the members present at the September session. The final resolutions are prepared for distribution to the member of the General Assembly and the Governor.

The 12th session of the SC SHL was held in the Chambers of the South Carolina House of Representatives in the South Carolina State House on September 14-16, 2010. 

Gloria Bonali can be contacted at bonali@sccoast.net

PrimeTimes invites you to check out the many Cultural Events taking place at CCU. For more information on all cultural events go to www.coastal.edu/culturalarts.

Active Gaming for All Ages – Coastal’s Exergaming Lab Offers New Opportunities

Active gaming and Coastal’s exergaming laboratory can be an engaging, motivating and effective form of exercise. It can offer unique benefits to the older adult. And best of all it has the potential to make exercise fun.

Consider visiting the Exergaming Laboratory
The facility is located in The Williams-Brice Physical Education and Recreation Center and has available open hours with training/orientation sessions available. Individuals also will have an opportunity to participate in ongoing research studies related to active gaming.

For more information, contact Tim Meyler, exergaming lab coordinator at 843-349-4183 or tmeyler@coastal.edu. To view a recent “Coastal Today” feature on the facility, visit http://www.vimeo.com/11089797.

Bridgette Johnson is a PrimeTimes pioneer contributor; and a favorite to PT readers. Her writing is sure to encourage us to think of home, of growing up, of parents and siblings and grandparents and old friends and old stories; school days and maybe even old romances. As stated in previous issues, Bridgette is the Horry Home Companion, bringing life alive with tales – not “tail” but true and heartfelt. Bridgette is a gardener as well as a writer, sowing seeds for blooming and for thinking. When she isn’t doing all those things, she is helping local businesses and owners as Executive Vice President of the Conway Chamber of Commerce. And she has taught creativeness and tale talking-writing to CCU students. Johnson can be reached at 843-248-2273.

Today, I’m 38 years old… the same age as Linda when she decided to trade in the little wedge heels to follow her dream. She took all the good in her life and made it better and removed the unneeded and the unnecessary and left it behind. As women, we have the license to rediscover and find ourselves. It’s our right and it’s our duty to inspire others to dream a little dream and think “One day, when I grow up, I want to be…whatever I want to be.”

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Night Eating Syndrome: Too Many Calories After Dark? .......... continued from page 2

sleep awakenings than controls (3.6 vs. 0.3 per night) and among the night eaters, 52 percent of the awakenings were found to be associated with food intake as compared to zero percent of the controls. Researchers have noted that night eating is not equivalent to night time snacking and that sleep disturbances are a defining component of NES. Other sleep problems noted by those with NES include initial insomnia, sleepwalking and confusional arousal.

If you or someone you know has a number of “yes” responses for those NES items listed in the box to the right, it might be wise to schedule a medical exam. According to recent updates on treatment by Albert Stunkard, the man who coined the term “NES”, almost two-thirds of those persons with the syndrome in his University of Pennsylvania study were helped by taking certain antidepressants. Other recommendations include an evaluation with a counselor trained in the field of eating disorders. In addition, a registered dietitian can help develop meal plans that distribute intake more evenly throughout the day. Learning to control stress is also an important component in managing the syndrome.

Do you think you have Night Eating syndrome?

- Do you skip breakfast at least four times a week?
- Do you have no appetite for breakfast?
- Do you consume more than half your daily calories in snacks after your evening meal?
- Do you have difficulty falling asleep or staying asleep more than four nights per week?
- Do you consume high calorie snacks when you awaken at night?
- Are the foods you eat at night mostly carbohydrates?
- Do you feel tense, anxious, upset or guilty while eating?
- Do you suffer from depression which worsens at the end of each day?

Sharon Thompson can be reached at thompson@coastal.edu. Sharon is a frequent contributor to PrimeTimes and her articles can be found in previous issues by visiting www.coastal.edu/lifespan and clicking on PrimeTimes.

Discover Your Strengths and Create Your Ideal Life .......... continued from page 7

appearance and function occurred with both programs. Further, both programs reported significant decreases in body mass index.

I am ready to get started! What are things that I can do today to move me closer to fully thriving? The following activities can get one started:

Barbara Fredrickson in her book, Positivity, introduces ten forms of positivity: joy, gratitude, serenity, interest, hope, pride, amusement, inspiration, awe and love.

Today’s Activity: Put “gratitude into action” by giving appreciation to someone who has done something nice for you that brought you joy.

Sonja Lyubomirsky’s book, The How of Happiness, describes a variety of “happiness activities” that are designed to increase happiness.

Today’s Activity: Take care of your body through physical activity. Discover how you can be active today! Start by taking a 10 minute walk in your neighborhood or using the stairs at work. (Happiness Activity #12)

In Creating Your Best Life, Caroline Adams Miller and Michael Frisch outline eight research based happiness boosters.

Today’s Activity: Take time to “Savor happy memories”. Put down the laptop and cell phone. Turn off the TV and radio. Spend five uninterrupted minutes reminiscing about a truly joyful and positive experience. Create the picture of this experience in your mind and savor it! (Proven Booster #5)

Additionally, a wellness coach will work with you to help you develop a vision of your future, set specific goals, and create a series of positive activities (just like the examples above), which will enable you to move closer to creating your ideal life! 

For more information about wellness coaching or how to become involved in a research study, contact Lisa A. Barella, Assistant Professor of Exercise and Sport Science and Wellcoaches® Certified Wellness Coach at lbarella@coastal.edu.
The Candy Dilemma: Trick or Treat?

By Larissa Gedney, MS RD LD
Clinical Nutrition Manager, Conway Medical Center

As a child, I remember visiting a neighbor’s house on Halloween who always gave out boxes of raisins, pencils and sometimes even apples. He was a dentist, and arguably, one of our least-favorite neighbors on Halloween night. But with autumn comes the start of a season of indulgences, so how do you make it through without succumbing to all the tasty vices and ultimately, a frightening weight gain? We can start by understanding a few basics about sweet treats:

► Chocolate is undoubtedly one of the most popular candies, and even has some health benefits to tout. Dark chocolate (semi-sweet and bitter) contains significant levels of antioxidants, which help prevent the body's cells from toxins and damage. Chocolate also contains flavanoids, which have antioxidant properties and may help lower blood pressure. Some chocolate manufacturers are even adding fiber and dried fruits for an additional antioxidant-boost. But with the health benefits comes a whopping dose of fat and calories, which can contribute to weight gain.

► Some candies may contain heart-healthy nuts, such as almonds and walnuts, giving the candy additional protein and healthy, unsaturated fats. The nuts, however, are often hidden under sugary, candy-coatings with minimal nutritious qualities.

► Sugar-free candies do not necessarily mean “calorie free”. Oftentimes, the sugar is replaced with higher levels of fat and sugar alcohols, which can produce a laxative effect when consumed in excess. Conversely, candies that claim to be “fat-free” or “naturally cholesterol-free” may still contain high levels of sugar and calories.

At the end of the day, the old cliché, “Everything in moderation” wins out. Freeze any left over Halloween candy, or keep it out of sight. Look for candies lowest in saturated fat, and buy bite-size bars to better control portions. And if you are one of those people who just can’t resist the temptation when candy is in the house, well maybe you might want to try giving out pencils this year.

If you have questions about this article, Larissa Gedney can be reached at Conway Medical Center at 842-347-8241.

We want to hear from YOU!

If you have comments or questions about articles in this issue, want to submit a letter to the editor, ask a question or make a comment, or if you would like to suggest appropriate subjects for consideration in future issues, the PrimeTimes staff wants to hear from you. If you want to be added to the PrimeTimes mailing list, just e-mail, call, fax or write to let us know.

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NEW Investment Website

Norm Whiteley, a frequent PrimeTimes contributor of finance and investment articles has begun a new website that interested readers can check out.

Do you have questions about investing? Or maybe some experience or expertise you would like to share with fellow investors. Now you can post questions or comments as they arise. The OLLI Investor Education Clubs are going online and anyone with a computer can now participate in the online discussions. Just go to www.groups.google.com/group/investment-fundamentals and start enhancing your investment education with discussions moderated by Norm Whiteley. There won’t be recommendations for specific investments, but hopefully you’ll get enough information to help making decisions yourself or finding the best places to get more assistance.
When I stopped the bus to pick up little Johnny for pre-school, I noticed an older woman hugging him as he left the house.

“Is that your grandmother?” I asked as he boarded.

“Yes” Johnny said, “She’s come to visit us for Christmas.”


“At the airport,” Johnny replied.

“Whenever she wants to visit, we just go out there and get her.” §