The Difficult Nutrition Client: Breaking Through and Moving Forward

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Regardless of the number of years of practice as a registered dietitian nutritionist, a difficult nutrition client that resists even your best efforts to produce change is inevitable. Although resistant clients can be found in all practice settings and within every clinical diagnosis, the two types of clients that this article will address include those who struggle with eating disorders (specifically anorexia and bulimia) and the chronic dieter. After defining “resistance” from the perspective of both the client and the dietitian, the metabolic changes that can occur during chronic eating dysfunction and how these physical changes affect progress will be addressed. Based on this expanded understanding, advanced counseling strategies using creative analogies, real-life props and mindful exercises will be provided. Combining a deeper understanding of the relationship between physical and chemical changes with strategies to break through client resistance can help redefine progress for both the client and the dietitian, and change an impasse to a new beginning to help create lasting health change.

The “Difficult” Nutrition Client

Who is a “difficult” nutrition client, and what makes him or her so difficult? According to The Merriam-Webster Dictionary, the adjective, difficult, means hard to do or make, or hard to understand. The English Thesaurus offers the synonyms problematic (challenging, demanding, testing, tiring) and obstinate (stubborn, unmanageable, resistant). These words tap into the emotions that the stress and conflict of resistance brings into the client relationship. Aggressive or quarrelsome resistance is often assumed; however, resistance can come in a passive form, within an outwardly submissive attitude but refusal to comply or in a silent, non-violent act such as fasting itself. Client resistance can occur independent of clinical diagnosis, length of diagnosis and even length of treatment. The commonality rests in the physical and emotional behaviors or traits that an aggressive or passive resistance creates within the therapeutic environment.

However, resistance does not rest solely on the client. Perhaps the resistance felt by a clinician is a sign that the client is being pushed too quickly, the clinician is not listening to the deeper needs reflected in the dysfunctional eating behaviors or the words being used are not motivating change. Is it time to rethink the way the dietitian and client communicate? According to the International Food Information Council Foundation’s Food and Health Survey (2006-2010), imparting knowledge through education is not enough. Current methods have not created long term change, and dietitians must regain the consumer’s trust by placing less emphasis on information delivery alone. Understanding the individual’s complex needs through active listening, and delivering more positive, individualized messages using interactive and hands-on direction are key.

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**From the Chair**

Adrien Paczosa, RD, LD, CEDRD

Hello Friends,

I think one of the greatest gifts about being a BHN member is how we truly can feel like friends and connect on a deeper level in this DPG. In my experience, the connections with people who I have met in person or over the computer through BHN have truly been heartfelt connections. These true connections are what has and will continue to build up BHN to amazing levels. Thank you for being willing to continue this gift BHN has given me.

Who attended FNCE®? How much fun did you have?! Our Pre-FNCE Workshop was beyond expectations and truly our speakers CAPT Joseph R Hibbeln, MD USPHS; Ralph Carson, PhD RD LD; Lisa Kantor, JD changed my life and how I look at nutrition, brain chemistry and reimbursement. If you were not able to attend the Pre-FNCE Workshop please stay tuned, because we are trying to get the speakers for webinars soon! Our spotlight session by Megan Kniskern, MS, RD, CEDRD and Dr. Steven Karp, DO, FACN was a full house of engaging RDNs wanting to learn how nutrition and addiction recovery impact clients success and recovery. Thank you again to everyone who helped make the Pre-FNCE Workshop and spotlight session possible.

After FNCE® it takes me a few weeks to recover and sort through all the handouts, session notes, and samples. Yet this year was a bit different. I wanted to rush home and start using all this new knowledge and tools I had learned from sessions the next day with clients. After about a month, the bright, shiny new tools were not as exciting and this got me thinking: how can we as behavioral health dietitians continue to stay motivated to learn new tools, enhance our current tools and build up our skills? What has worked for me is scheduling out opportunities to learn from others. We are all super busy between work and personal life, and scheduling in one time a month helps to keep me energized. I would love to hear what everyone else does to continue this gift BHN has given me.

One more thing: can you guys keep a secret? Your chair-elect, Diane Spear, MS, RDN, LD, FAND is going to blow your socks off with her passion, heart and organization. There are some amazing things planned for BHN that I am sure you will want to be a part of.

Thank you again for allowing me the honor of being your chair and your friend. See you on social media!

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**Future Submission Deadlines**

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Dietitians who work in the behavioral health field and have been practicing these skills are in a unique position to lead by example. “Instead of standing outside the house with the person that lives there and going over a checklist you have brought with you in order to inventory its contents, together you go in and experience what’s there,” as stated by Renee Balthrop, PhD, is a beautiful statement of the goal of the registered dietitian nutritionist in working with clients, especially the most resistant.

Resistance in the Client with Anorexia

Since understanding the complex needs of the individual client comes before any effective change can take place, the first step into the client’s “house” is towards increasing awareness of how dysfunctional eating behaviors produce physical changes in the brain and body that perpetuate the behavior cycles. Sometimes simply sharing the physical barriers (changes in metabolism, hormone and brain chemistry) that are a result of the diagnosis itself is a starting place to help the client break through resistance by taking away the mystery behind the “habits” and separating willpower from reality. As the dietitian translates physical consequences of eating behaviors into real-life, non-judgmental terms, the client can begin separating “lack of willpower” from the inevitable body responses that often produce the very frustration or despair on which client resistance is based.

Sometimes simply sharing the physical barriers that are a result of the diagnosis itself is a starting place to help the client break through resistance by taking away the mystery behind the “habits” and separating willpower from reality.

Anorexia decreases the client’s metabolic rate by 20 to 36% of normal rate. The body develops a priority list for calories to sustain life, focusing on the brain’s energy needs as essential and compromising other body functions and organs in the process. Cells learn to perform their jobs without burning as many calories as they simultaneously begin giving up non-life threatening responsibilities, which often target menstruation and digestion. Severely restricted caloric intake simply cannot maintain a healthy gut and adequate digestive enzymes, so the refeeding process during early stages of recovery is physically painful, adding to the emotional trauma.

At the same time, clients with anorexia require significant calories in the initial stages of weight gain. Typical energy needs for weight gain are 20 to 40 kcal/kg, but anorexia requires 60-100 kcal/kg for initial weight gain in the early phase of recovery. Helping the client prepare for the physical and emotional trauma created by higher calorie needs for weight gain than typically expected combined with a painful gut response due to inadequate digestive enzymes within a malnourished environment may lessen the resistance simply by removing the “surprise factor.” A client who struggles to control his or her body will need to be reassured that this initial phase of recovery is to be expected and will indeed improve over time.

Furthermore, anorexia alters the brain reward circuitry system. Hunger in the normal brain increases sensitivity to reward in general and increases activation in immediate reward circuitry specifically. This combination leads to increased satiety which activates cognitive control circuitry; therefore, hunger changes can affect decision making. However, hunger does not motivate anorexic brain to eat. No differences exist in the anorexic brain’s response in both the reward and cognitive control circuitry during hunger OR satiety. An anorexic brain cannot depend on any reward or cognitive decision-making support from the brain to control the decision to eat and how much. Helping the client understand that hunger and reward signals are not accurate or dependable in an anorexic brain may help decrease resistance to feeding if the client bases that decision on whether he or she feels “hungry” or not.

The fact that malnutrition mimics the same physical and mental behaviors of depression yet alters the body’s ability to respond to medication is another physical barrier to progress for a client with anorexia. Malnutrition and depression both lead to a decrease in energy, mental clarity, mood stability and social activity. Yet the medication that is often prescribed for anorexia and depression cannot perform its desired function within a malnourished brain and body. Helping the client understand that the refeeding process alone will improve depression and enhance the efficacy of any antidepressant medication can lessen resistance.

As the client enters the second phase of refeeding, a shift often occurs from a state in which a relatively high caloric intake produces minimal weight gain to a state in which relatively fewer calories than rationally expected produce a more rapid weight gain.

Hunger becomes more intense as the physical sensation returns at the same time that digestive enzymes are being replenished. Starvation itself produces endorphins, the body’s natural “feel-good” pain relief; therefore, re-feeding, as part of the healing process, naturally reduces those very endorphins. The body’s response to hunger, which has been avoided, feared and ultimately sedated with starvation itself, is returning, and the client resistance to progressing another step becomes intense.

Practical Application

The opportunity to use real-life visuals in an everyday analogy can help relieve the client’s anxiety. Show the client two sponges, one that is dried, shriveled, and curling up at the edges and one that is fresh, moist and normal-sized. Both started out the same size with the same function, but the dried sponge has been inactive, unused, ignored, and left to deteriorate.

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Resistance in the Client with Bulimia

Although anorexia presents challenges in the intertwining of physical and emotional consequences of prolonged restriction, bulimia presents its own unique challenges that affect both metabolism, hormone levels and brain function. The metabolic rate in a client with bulimia decreases as the severity of the compensatory purging behaviors increases. With 7.5 or more purges per week, metabolism decreases approximately 13%. However, four or less purges per week do not seem to produce any significant change in metabolic rate. If the client is on antidepressant medications, used much more frequently in treatment of bulimia than in anorexia, metabolic rate can decrease 17-24%. Increasing the frequency of purging may feel like a quick fix to remove additional calories consumed but actually reduces metabolic rate, potentially leading to weight gain. Guiding the client to better understand this dichotomy helps break through resistance when the client realizes weight may not automatically decrease even if additional purging is added.

In a similar manner, the body, during the first six weeks in recovery from bulimia, releases large amounts of anti-diuretic hormone. This surge of anti-diuretic hormone causes the body to retain extra fluid which is most likely retained in the face, ankles, skin, fingers, abdomen and inner thigh area. Three months is the time frame in which the body can return to its natural hydration; however, the recovery process is delayed if the client returns to purging or if the client restricts or over-exercises as a compensatory action to reduce the extra fluid weight during this recovery stage.

When the client sees fluid retention in general as well as specifically targeted to areas of concern such as abdomen and inner thigh, resistance to recovery escalates. Encourage the patient that the fluid retention “rebound” is normal, expected and temporary, and in fact will resolve itself within three months if the client remains focused on resisting the urge to restrict, over-exercise or purge. The excessive fluid retention is the body’s “survival” response, since the fluid regulation system has been forcibly and erratically manipulated with binge/purge behaviors.

Practical Application

To help the client relate to this fluid transition, an allegorical narrative of a hiker and his survival backpack can be shared. Take the client on a journey through the hiker’s preparation for a long distance, wilderness adventure. Although his backpack will be weighted down, the hiker must pack water for every single day of the journey or he will not survive. (Obviously the hiker must pack food as well, but for the purpose of this story, water is the focus). The water supply is heavy but essential because the hiker knows that no other source of water will be available unless he provides his own. Loaded up and weighted down with water for the first day and every day thereafter until the trail ends, the hiker begins his journey. Surprisingly, within the first few hours, he finds that a water source is available on the side of the trail. Obviously this is an anomaly and not to be trusted, so he ignores it. In a few more hours, another water source appears. He still does not trust this unexpected good fortune nor does he remove any survival water from his backpack. However, water sources on the trail continue to be available day after day. The distrust and apprehension start to slowly fade, and the hiker cautiously stops to take advantage of a few sips of water. But he does not remove any of his supplies yet. Can he really trust that water will be provided on a regular schedule to meet his needs without carrying a heavy backpack of his own?

Regardless of his insecurity, the water source on the trail continues to show up day after day. Trust in the new source of water strengthens, he consumes more at every rest break, resulting in enough security to pour out an equivalent amount of water from his own stored load. As the availability of water remains consistent, his willingness to remove more of his survival-based water, even for the future days’ supply, increases. He has transitioned from not trusting the new water supply at all, to taking small sips but not removing any of his own
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water stores, to cautiously releasing a small amount of stored water but much less than he had consumed from the new water source, to confidently releasing the surplus that he has been carrying since the start. The day comes when he realizes that he no longer needs to be slowed down by carrying any extra water supply. He releases all of the extra water and continues on his way with a lighter backpack in full confidence that his water needs will be met consistently every single day.

This imaginative story represents the body’s need to hold on to extra fluid because of its initial “distrust” that the eating disorder behaviors causing erratic fluid imbalance have really ceased. The resistant client who struggles with bulimia and the consequences of recovery can relate to this narrative and be more willing to stay on track for yet another day when affirmed that the body’s ability to regulate a normal fluid balance will return.

Resistance in the Chronic Dieter

Although bulimia can present unique challenges specific to fluid balance due to the purge behaviors, the client who chronically diets within a pattern of restriction then over-consumption has similar chemical responses to the binge behavior common to bulimia. A physical barrier to progress resulting from binging or simply over-eating is the dopamine response to food. The dopamine hormone is the precursor of adrenaline, the “fight-or-flight” hormone, also known as a chemical responsible for “love at first sight”, making you feel infatuated with someone (or something). Dopamine is released in response to love/sex, drugs of abuse, and food, and dopamine circuits are associated with reward. The brain will automate a response to a behavior if it’s repeated often, although “wanting” something does not have to mean “liking” it. In fact, reward does not equal pleasure in all circumstances, because the reward system in the brain does not differentiate between a habit that produces shame and regret or a habit that encourages joy and well-being. If the brain can predict an opportunity for a reward, it will respond to the dopamine trigger. Pictures of trigger foods, or food-indulgent environments in and of themselves, trigger a dopamine response since the visual image of food alone predicts an opportunity for a reward.

How does this affect a client who struggles with chronic dieting? Self-blame and shame when she does not understand how she ends up eating to the bottom of the cookie jar when she knew she was not physically hungry. All she had done was consume her frozen diet meal and sit down to watch television. Unaware that the commercials for trigger foods literally triggered her brain to release dopamine, she mindlessly finds herself doing what she had hoped her willpower would prevent. Dopamine is obviously not the only issue involved; however, understanding that simple pictures of favorite foods can trigger a chemical drive to eat, whether the body is physically hungry or not, helps move the client away from the shame and guilt that accompanies a situation when “willpower” failed.

Practical Application

When working with chronic dieting scenarios and a difficult client who is trapped in passive resistance due to failure and shame, suggest focusing on “The Permission Plate.” This mindful activity has been successful with clients who find themselves grazing all afternoon and easily distracted by sights and sounds of food even if not physically hungry. Encourage the client to choose a favorite plate from home or, better yet, purchase a new, decorative dinner plate for this purpose. The client does not have to share the purpose of this plate with any other family member, and can do this activity when alone. Ask the client to designate a “guilt-free” zone in which to place this plate. Set a scheduled “eat” time, using an alarm if desired. During the “wait” time prior to the scheduled meal or snack, place every bite that would have been grabbed, spooned, and consumed on this plate. Remind the client to tell herself that she has full permission to consume what is on that plate, but only has to wait until the scheduled hour to do so. Suggest keeping a “feelings” journal beside the Permission Plate, writing down any feelings and thoughts that arise. When the scheduled time arrives, take the Permission Plate and sit down in a relaxing, quiet environment. Simply observe what is on the plate and what would have been consumed if not waiting for a designated time. Using mindfulness skills, think or perhaps record any feelings that arise, noting the five senses and how they become involved, variety or lack thereof.

Remember permission to consume all of the food is granted. Determine what and how much of the choices are still desired. She may not want it all now since the initial dopamine trigger to eat each item has passed. Or perhaps she does want it all, regardless of how much is on the plate. The food consumed now enters a body that has had time to use the fuel eaten at the previous meal and is better prepared to use the energy from these foods and enjoy it more fully. Record feelings and thoughts after eating, noting any changes in physical sensations, mental judgment and emotional acceptance. If done without condemnation and with full permission to experiment, this can be a powerful tool of self-discovery while slowing down the hormonal reaction to eat immediately at the first dopamine trigger.

Working with a difficult client is never easy and an inevitable part of the relationship between you as the registered dietitian and your client, especially if your client struggles with anorexia, bulimia or chronic dieting. However, an impasse can become an entryway into the next step towards recovery as the client learns to understand the physical, chemical and hormonal changes that dysfunctional eating behaviors can create. This understanding is validated and enhanced by continued on page 6
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using every-day objects, creative narratives and mindful activities to illustrate the body changes and create a memory that can be revisited as the client moves toward full recovery.

...every-day objects, creative narratives and mindful activities... illustrate the body changes and create a memory that can be revisited as the client moves toward full recovery.

In the words of Jane Hirschman and Carol Munter, “We do not judge our success by the numbers on the scale, but by the extent to which you accept yourself. We do not judge by will-power...but by the degree of comfort you feel around food and the extent you are able to think about your problems rather than eat about them.”

About the Author

Tammy Beasley, RDN, CEDRD, CSSD, LD is the National Coordinator of Educational Outreach and Development for Castlewood Treatment Centers for Eating Disorders. She was the first RD certified with the International Association of Eating Disorder Professionals (iaedp) and currently serves as iaedp’s Director of Certification. Within her 30 years of practice, Tammy has spent the last 26 years working in the field of eating disorders - and considers it an honor to work alongside BHN RDs who are passionate about helping clients reach full recovery in body and mind.

References

5. Renee Balthrop, PhD. The Renfrew Perspective; Fall 1996, Vol 2.

CPE Questions for The Difficult Nutrition Client: Breaking Through and Moving Forward

1. How many calories are required for a client with anorexia in the initial stage of weight gain?
   a. 10 – 20 kcal/kg
   b. 20- 40 kcal/kg
   c. 30 – 50 kcal/kg
   d. 60 – 100 kcal/kg

2. Malnutrition and depression both lead to which of the following?
   a. Increase in energy
   b. Increase in mood stability
   c. Decrease in mental clarity
   d. All of the above

3. In a client with bulimia, 7.5 or more purges per week results in a ______ decrease in metabolism.
   a. 13%
   b. 17%
   c. 21%
   d. 25%

4. Clients in recovery from bulimia who cease purging will most likely experience fluid retention due to release of anti-diuretic hormone for approximately:
   a. Two weeks
   b. Six weeks
   c. Twelve weeks
   d. Sixteen weeks

5. Dopamine circuits are associated with reward versus pleasure and are released in response to:
   a. Drugs of abuse.
   b. Food
   c. Love
   d. All of the above

CPE credit (1.0 hour) is available from BHN for the full text version of the article, The Difficult Nutrition Client: Breaking Through and Moving Forward. Access the article at http://www.bhndpg.org/cpe-articles-quizzes
Hands-on Nutrition Interventions for Addiction Recovery
Kristie Moore RDN • David Wiss MS RDN

Nutrition & Addiction - Background

Substance use disorders (SUD) can lead to many adverse health effects including nutritional deficiencies and malnutrition. Research shows that proper nutrition can have a positive effect on recovery outcomes such as abstinence (Barbadoro et al., 2010), however it is not common practice for patients in substance abuse treatment to receive nutrition education and counseling. Clients in early recovery tend to gain excessive weight only to become self-conscious and unhappy with their appearance, which may lead to anxiety and depression. Wiss (2013) found that SUD patients have more difficulty controlling their eating when depressed. These experiences may cause significant distress and put individuals at risk of relapse (Cowan & Devine, 2012). Registered Dietitian Nutritionists (RDNs) should play a vital role in offering recovery services to drug addicts and alcoholics.

Cowan & Devine (2012) evaluated the implementation of a controlled, 6-week environmental and educational intervention called RHEALTH (The Recovery Health Eating and Active Learning in Treatment Houses). The program was created to promote healthful changes in eating habits and to reduce excess weight gain of men in substance abuse treatment. 107 men from 6 different SUD treatment facilities were invited to participate in this program. The program supported changes in the food environment of the treatment centers, offering healthier food choices as well as weekly nutrition and cooking classes.

In sites where there was a higher participation rate from residents (in addition to support from staff) there was a significant decrease in total energy intake, as well as a reduction in daily servings of sweets, fats and oils, and lower BMIs. The findings from this study suggest that nutrition interventions can greatly contribute to positive behavior changes within this population.

Nutrition and cooking interventions in SUD treatment facilities are quite scarce, as there is limited research specific to the SUD population. Although not pertaining directly to individuals with addiction issues, research has found that barriers to healthy eating include a lack of confidence in one’s ability to shop for, choose, and prepare healthy foods (Reicks, 2014; Winkler and Turrel, 2009). The inability to prepare food for oneself may lead to a poor quality diet by increasing the intake of highly processed convenient foods (Reicks, 2014). In a cross-sectional study by Winkler & Turrel (2009), it was found that fewer vegetables and raw produce were purchased by individuals who were less confident in their food preparation skills, compared to those with a higher confidence level.

Nutrition and culinary interventions that provide hands-on cooking instruction can offer cooking, shopping and food preparation skills, in addition to nutrition education. Acquiring these skills can increase an individual’s self-confidence in shopping for and preparing healthful foods, which is likely to decrease the intake of processed, convenience foods. Offering these health-promoting programs can increase the success rate for long-term recovery while reducing a person’s risk of becoming overweight or obese and decreasing the risk of chronic disease (Barbadoro et al., 2010; Cowan, 2008 & 2013).

A study by Barbadoro et al. (2011) investigated the impact of a nutrition education intervention on the nutritional knowledge and behaviors of 58 alcohol dependent participants in an inpatient treatment facility in Italy. The authors found a positive correlation between the nutrition intervention and the participants’ knowledge of the relationships among nutrition, food, and health. The authors state that: “alcohol dependent individuals are receptive to educational messages regarding nutritional health.” During a 6-month follow-up interview, 80% of the 45 participants who responded reported that they continued to practice the skills they obtained during the intervention. Findings support the assertion that receiving nutrition education in a drug and alcohol rehabilitation environment can positively impact food choices and eating habits.

It is especially important to begin the education process in the first months of recovery to emphasize the importance of choosing nutritious foods, as well as the impact that food has on brain chemistry, and role it can play in chronic diseases such as obesity and diabetes (Barbadoro et al., 2010; Cowan & Devine, 2013). This message will be critical as the client transitions to a lower level of care where they will be responsible for preparing their own meals and practicing self-care. Clients should be reminded that nutrition is an integral component of recovery supportive of sobriety.

Hands-on Culinary Intervention

In our research project we implemented a hands-on culinary and nutrition intervention at Breathe Life Healing Centers in Los Angeles, California. This 12-week study consisted of 4 separate groups, each lasting 3 weeks, with a total of 15 participants. The information offered during this intervention was intended to provide individuals in early recovery with the skills and confidence they need to make healthy food choices, as they begin to make the transition to more independent stages of treatment. The intervention included a grocery store tour and weekly nutrition education classes followed by a hands-on culinary component.

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Hands-on Nutrition Interventions for Addiction Recovery

Data revealed a significant increase in the participants’ enjoyment of cooking after completion of the cooking classes. When asked during the program evaluation what part of the program they liked best (Grocery Store Tour, Nutrition Education, or Hands-on Cooking), 13 of the 15 participants chose “Hands-on Cooking.” Confidence level related to food preparation skills, and level of comfort in purchasing whole grain products, both increased significantly. The finding is consistent with previous research that has found that interventions containing both a nutrition education component and a “hands-on” cooking element increased the participants’ cooking confidence and skill level (Wrieden et al., 2006). Research by Levy & Auld (2004) shows similar results, where participation in “hands-on” cooking classes led to improved attitudes, behaviors, and knowledge toward cooking and nutrition, compared to interventions in which participants observed a cooking demonstration or listened to a lecture.

Conclusion

Developing the skills and confidence to prepare healthful meals during SUD treatment is important for sustainable recovery. Proper nutrition can help the body heal from years of damage, as well as decrease risk of depression, anxiety, obesity, and other chronic diseases. Although the data analysis for this study found limited statistical significance in other areas, there was a positive trend found in the mean averages between the pre- and post-intervention data. Self-efficacy and positive attitudes about cooking, purchasing, and preparing healthy foods increased after the nutrition and “hands-on” culinary intervention. Future studies utilizing a larger, more diverse sample are definitely needed to increase awareness of the important role that nutrition plays in recovery from substance abuse (Moore, 2015).

About the Authors

Kristie Moore, MS, RDN is a Registered Dietitian Nutritionist with Nutrition in Recovery in Los Angeles, California. She completed her Master’s Degree in Nutritional Science from California State University, Long Beach where she created a Hands-on Nutrition and Culinary Intervention for substance abuse treatment centers. kristiemoore@nutritioninrecovery.com

David Wiss, MS, RDN is the founder of Nutrition In Recovery, which specializes in: Addictions, Eating Disorders, Weight Management, Sports Nutrition, and General Wellness. Mr. Wiss has shared his expertise with numerous eating disorder and addiction facilities throughout the greater Los Angeles area. Nutrition in Recovery services include consultation, screening/assessment, meal planning, process groups, group education, individual counseling, outings/events including supermarket tours, and multidisciplinary treatment planning. David is a co-founder of Dietitians for Professional Integrity, and a major advocate for the role of nutrition in recovery from addiction and eating disorders. View some of his work at www.NutritionInRecovery.com.

References


Candidates for 2016-17 Officers

The Behavioral Health Nutrition DPG Nominating Committee is pleased to announce the slate of candidates for the 2016-17 officer positions:

Chair-elect: Janice Scott MS, RD, CSP, LD

Secretary: Cynthia A. Rutkowski, MA, RDN, FAND
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Misty Roberts, RD, LD

Nominating Chair-elect: Sara Wilburn, MS, RD, LD
Theresa Wright, MS, RD, LDN

Thank you, BHN DPG Nominating Committee
Aggression, Violence and Nutrition

By Ruth-Leyse-Wallace PhD

With current reports of violent and aggressive behavior at schools and public sites, in addition to political discussions of crime and justice, it seems important to consider the influence of nutritional status and nutrients on violent, aggressive behavior. Over the past decade, emerging scientific research is suggesting imbalances in neurotransmitters, their precursors and other biochemicals and nutrients can significantly contribute to severe behavioral disorders and violence (Gesch, 2014).

Examples of Studies Showing Reduced Problem Behavior with Nutrition

A 2002 study conducted in Aylesberg, England looked at the efficacy of nutrient supplementation in reducing minor and serious aggressive behaviors in young adults. This experimental, double-blind, placebo-controlled, randomized trial involved prisoners ≥18 years old (N=231), and compared their disciplinary offenses before and after a minimum period of two weeks up to nine months of supplementation of vitamins, minerals and omega-3 fatty acids. Supplements of vitamins and minerals were at the level for the UK Dietary Reference Values. Dosage of fatty acids were 1260 mg linoleic acid, 44 mg docosahexaenoic acid (DHA). Psychological measures of emotional control, anger, anxiety and depression and self-reported health status were also conducted. During the study there were 416 minor incidents and 338 serious incidents reported – a reduction of 33% of minor incidents and a 37% reduction of serious incidents compared with baseline (Gesch 2002).

A follow-up three-year study at three prisons includes blood tests to determine nutritional status along with computer-based cognitive tests. Results have yet to be published. Gesch has noted that the quality of the diet and knowledge about choosing food in youth not in prison is likely worse than the intake of those in prison.

In a similar Dutch study of 221 prisoners aged 18-25 years old, Zaalberg et al provided supplements containing 400 mg DHA, 400 mg EPA and 100 mg GLA. Linoleic acid was omitted because of its abundance in the Dutch diet, but compared to the Gesch study, dosages of supplemented magnesium, and B-carotene were higher, levels of vitamin D and phosphorous were lower. A detailed comparison of supplements in this study and the Gesch study are furnished in this report. The Dutch trial showed a 34% reduction in reported incidents, and that alcohol or drug-related violations (possession of illegal substances in prison) influenced the results. The authors stated that it could not be concluded that supplements reduced aggressive and disruptive behavior (Zaalberg, et al 2010).

A 2015 study of blood parameters, (including lead), and psychopathology of 51 forensic psychiatric inpatients identified low levels of vitamin D3 and omega-3 fatty acids, high levels of vitamin B6 and a high ratio of Copper to Zinc in this population. Significant associations between fatty acid measures, aggression and psychopathology were observed (Zaalberg, et al 2015).

Certain biochemical patterns have been identified in violent individuals, but not shared by those who grew up in the same environment. Dr. William Walsh and other scientists at the Argonne National Laboratory initiated research on the biochemistry of violent behavior of inmates at Statesville Penitentiary in Illinois. The first definitive results came with a sibling experiment, which tested 24 pairs of brothers who had been raised in the same households. In each sibling pair, one brother had a violent history and the other was an “all-American” boy with excellent behavior. The results showed a distinctive trace-metal pattern in the violent offenders, which was not present in the non-violent brothers.

The incidence of the Type B imbalance appears to be less than 0.5% in the general population, but between 20-75% in maximum-security prisons in Illinois, California, and Ohio. Further studies replicated these results. Since that time, the Health Research Institute, a non-profit organization founded by Dr. Walsh, has tested over 10,000 children and adults with behavior problems, with similar results (Bitsas, 2004) (Walsh, et al 1997).

A study of children from age 3 to 17 found that children malnourished at age 3 were more aggressive or hyperactive at age 8 years, had more externalizing problems at age 11, and had greater conduct disorder and excessive motor activity at age 17. The results were independent of psychosocial adversity and were not moderated by gender. There was a dose-response relationship between degree of malnutrition and degree of externalizing behavior at ages 8 and 17. Low IQ mediated the link

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<thead>
<tr>
<th>Table 1. Patterns of Biochemistry found by Dr. Walsh</th>
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<tr>
<td>Type A Biochemistry Pattern (non-violent brothers)</td>
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<tr>
<td>Show remorse after episodic outbursts</td>
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<tr>
<td>High Cu: Low Zn</td>
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<td>High Cu:Na ratio</td>
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<td>High blood Pb</td>
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<tr>
<td>Abnormal blood histamine (high or low)</td>
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continued on page 10
Adequate research design must be strictly planned and controlled for results that can add to this body of knowledge. Newly described influences of dietary factors on neuronal function and synaptic plasticity have revealed some of the vital mechanisms that are responsible for the action of diet on brain health and mental function. Several gut hormones that can enter the brain, or that are produced in the brain itself, influence cognitive ability. In addition, well-established regulators of synaptic plasticity, such as brain-derived neurotrophic factor, can function as metabolic modulators, responding to peripheral signals such as food intake. Understanding the molecular basis of the effects of food on cognition will help us to determine how best to manipulate diet in order to increase the resistance of neurons to insults and promote mental fitness. Home tests are available for assessing omega-3 fatty acid status.

References
Delegate Update:
Outcomes of the Fall 2015 HOD Meeting

continued from page 10

HOD Motion #1: The House of Delegates requests:

- RDNs identify and manage malnutrition in accordance with their scope and standards of practice including use of nutrition focused physical exams as one tool for nutrition assessments;
- Academy’s Research, International and Scientific Affairs Team and Lifelong Learning and Professional Engagement Team identify gaps and facilitate development of resources needed to educate members on the management of malnutrition, including nutrition-focused physical exams;
- Academy’s Lifelong Learning and Professional Engagement Team and Research, International and Scientific Affairs Team market and disseminate currently available resources to educate members on management of malnutrition;
- Dietetic practice groups and affiliates are encouraged to identify and promote opportunities to assist RDNs and NDTRs in developing skills and knowledge related to malnutrition management;
- NDEP and ACEND encourage educators to identify and/or develop malnutrition management educational opportunities for students;
- Center for Professional Development assesses the viability of a certificate program for hands-on nutrition focused physical exam training;
- Academy’s Nutrition Services Coverage Team collaborates with A.S.P.E.N. to continue discussions with the National Center for Health Statistics ICD Coordinating Committee for incorporation of the malnutrition nomenclature into ICD;
- Academy’s Research, International and Scientific Affairs Team, NDEP, ACEND and the Academy’s Nutrition Services Coverage Team present information on progress made on malnutrition related activities as part of the bi-annual report to the HOD. This information should be reported for at least the next 2 years by the organizational units.

HOD Motion #2: The House of Delegates requests the Sponsorship Advisory Task Force (SATF)

- Utilize the HOD’s feedback from the Fall 2015 HOD Workbooks, as well as documents provided to delegates (i.e., impact reports, Sponsor Summit Report), to finalize their report to the Board of Directors (BOD);
- The HOD requests that the BOD considers the HOD’s feedback as they prepare to take action on the SATF’s final report.
- The final SATF report will be distributed to the HOD after action is taken by the BOD.

In addition, the House of Delegates approved three (3) motions for Academy Bylaws amendments on the:

1. Nominating Committee Composition
   The rationale for this amendment is: A nominating Committee Evaluation Workgroup was appointed to review the Nominating Committee's roles and responsibilities, the qualifications and skill sets required of Nominating Committee members and the committee's structure, composition, size and tenure, leadership experience, and vast personal knowledge of Academy members. In order that the Nominating Committee members have a sound understanding of the Academy, its strategic direction, areas of dietetics practice, and the requirements for effective functioning in leadership positions included on the ballot, the workgroup recommended the composition of the committee be composed of members with a national presence and those who have held a variety of national leadership positions. Additionally it was recommended that the Nominating Committee include past Board members and/or those members with significant leadership experience and vast personal knowledge of Academy members.

2. CDR Mission Statement
   The rationale for the amendment is: The mission was modified to address the new interdisciplinary Board Certified Specialist in Obesity and Weight Management certification program by removing the specific reference to nutrition and dietetics practitioners. The interdisciplinary Board Certified Specialist in Obesity and Weight Management certification program will be available to other health care professions but those health care professions are yet to be determined. The practice analysis to determine the examination content and professions to be eligible for the certification program is underway. The results of this practice analysis will determine which health care professions are eligible for the certification. The following professions have been included in the practice analysis: RDNs, nurse practitioners, physician assistants, licensed clinical psychologists, behavioral therapists, clinical exercise physiologists, and licensed clinical social workers.

3. CDR Board Composition
   The rationale for the amendment is: CDR's external accrediting agency, the National Commission for Certifying Agencies, requires that the Commission/Board include a representative of each certification administered by the Commission. This position may be appointed following administration of the first examination in late fall 2015. It will be included on the national ballot for FY2017-2018 program year.

Additional Information

ACEND UPDATE

ACEND continues to explore ways to assure multiple avenues of communication with its stakeholders as it develops standards for the future education model. Starting on Thursday, November 12, 2015 ACEND will begin hosting a monthly virtual town hall at 11:30 am CT on the second Thursday of each month. Information for connecting to the virtual town hall will be posted on the ACEND Standards webpage www.eatrightacend.org/ACEND/Standards.
BHN Member Spotlight!

Marilyn Ricci, MS, RDN
President, National Alliance on Mental Illness

This past July, Marilyn Ricci, MS, RDN a soft-spoken woman with an understanding smile was elected to the presidency of the largest grass roots organization for Mental Health in America. Marilyn traveled on an awesome journey to reach this moment. This distinguished Registered Dietitian Nutritionist, writer, speaker, and business woman is also the mother of a gentleman who has a mental illness. She has managed all of these facets of her life with amazing agility.

Marilyn was drawn to Nutrition as an undergraduate in Home Economics. It was then that one of her professors encouraged her to become a RDN. She was encouraged to complete a combined Master’s Degree/Internship in Nutrition at the University of Connecticut. During her graduate studies, she discovered that she enjoyed writing. Her professors encouraged her gift. She has many articles in Nutrition to her credit.

Marilyn is able to reach a wide variety of readers by reaching out and grabbing their attention. She explains that she really thinks about the audience before she writes. For example, in an article written on Caffeine: The Good, The Bad, and the Ugly, published in the Body Matters section of Schizophrenia Digest, she hooks the reader right from the start as she describes the morning scenario for many of us:

“It’s 7AM. The coffee is perking away. The aroma wafts throughout your house. Ah, that first cup tastes sooooo good! The coffee slides down your throat, hits your stomach and is absorbed into your bloodstream. You feel the effects of the caffeine quickly.”

Then, when she writes for an article for wrestlers entitled “Nutrition Ideas for Wrestlers” she is BAM, right in your face with no nonsense sections of the article designed to address Eating Healthy Every Day, Pre and Post Competition Meals, and The “BEST” Beverages.

As a RDN she never misses the opportunity to weave in the strands of the science of nutrition and it is plain to see the hard work and love that she has for her field of expertise. Her work was never limited to writing. Never afraid to take a risk, she started her business called Cornucopia, when she was just 33. She tells a story of how her business got started. “I went on an interview at a nearby college. The administration was interested in hiring me, but they wanted me to work through my own business entity rather than as an employee.” The job responsibilities included running the college food service and teaching the Food Service Management Course. She took the job.

In short order, her husband could see the enormity of the project. “I’ll be your partner” he said, and he has ever since.

Marilyn said that they were under tremendous pressure to have the operation up and running in a month’s time. Their kids were in pre-school and elementary school. “Our parents came to help us,” she said. “We had to work around the clock!” They needed to hit the ground running with a 1st day of work which was a full blown catering event for Parents Day Weekend. “I remember that day as if it were yesterday!” Marilyn reminisced. “We had hired all these Chefs who we thought would be good, but we had no idea of how it would go. I mean we had interviewed them, had them cook for us… but who knew when the day came, how it would all go!”

Certainly there were glitches, but it was the beginning of a long relationship with the college and the start of a very worthwhile business. Cornucopia Foods became a thriving business, catering to special events and giving back to the community through service to elders with Meals on Wheels.

While her husband took care of most of the administrative functions at Cornucopia, Marilyn also worked as a consultant dietitian within the community. As a Registered Dietitian Nutritionist, she talks about her experiences with teaching nutrition to groups. She advises, “You have to approach people with small changes that they can make.” She encourages group interaction, all kinds of fun activities, brings visuals such as soda bottles filled with actual sugar amounts and adds, “try to give a little gift. It can be a small thing, such as a free coupon for a healthy food item. When I talked about fiber, I brought popcorn.” Marilyn says group teaching always goes better when you bring things to taste and to do.

Marilyn has managed to blend her brilliant career as a Registered Dietitian Nutritionist and business woman with her personal life in a path that is truly unique. 17 years ago, when her son was a senior in high school, he began to experience behavioral changes. He was eventually diagnosed with Schizophrenia. Marilyn talked about this time as a period of great darkness and difficulty for her and her family. “We were alone. There were not the resources that are there today. I was doing all this research trying to understand what was happening. Finally, we saw a psychiatrist who told us that we should join the National Alliance on Mental Health (NAMI). It was NAMI that saved us. We were able to connect with other families that were going through the same experiences.”

NAMI is a strong organization that places the focus on local groups. Marilyn and her family soon took part in a support program called Family to Family. She became a trainer in this program and still attends these programs whenever possible. She benefits tremendously from her own membership in NAMI and is very happy to serve in a leadership role for this organization. When asked how she sees BHN members becoming involved with NAMI, she encourages membership in the organization. She feels that Nutrition is a hot topic in mental health and foresees good career opportunities in this area. She states that as clinicians, we often see the person at their worst. We never get to see the full person. It is skewed—a crisis mode kind of view. She feels strongly that this is a field that requires experience and understanding of the population. She asks “What better way to acquire needed skills as a Behavioral Health RDN than to develop relationships and be educated first hand by those who are experiencing the difficulties that mental illness brings?” This type of experience can be had in NAMI.

Marilyn feels that there are definitely speaking opportunities within the local affiliate groups. Though they may be on a volunteer basis, a new RDN may gain excellent exposure to the field as well as personal growth that will help them understand their patients better and provide best practice. There are also SAMSHA (Substance Abuse and Mental Health Services Administration) grants that may help promote education and research for RDN’s who work with diabetics, for example, within the mental health population. These opportunities may be well worth looking into, as much research is still needed in the area of Nutrition for Mental Health.

Marilyn encourages all of us to get involved in whatever way we can.

As her You Tube message says “I am Marilyn Ricci, and if I can talk about mental health, you can too.”
Student Corner

Relationship Between Stress, Emotional Eating, and Binge Eating in College Students

By: Valerie A. Della Longa, Dietetic Student

Introduction
At least 3 out of every 10 college students are overweight or obese. Of multiple age groups, obesity prevalence has increased the most in the young adult (18-29) group. This number increases further in young adults who attended college. Though obesity is caused by a variety of issues, emotional eating is an understudied risk factor. Emotional eating cannot only lead to obesity and obesity-related health issues, but it may also contribute to the development of eating disorders, specifically binge-eating disorder (BED). As stress remains a major trigger of emotional eating, this article focuses on high-stress populations such as college students and the relationship between stress and other factors that contribute to emotional eating and binge eating.

Background
It is first imperative to differentiate emotional eating, binge eating, and obesity, as these terms have distinct meanings yet can be interrelated. Emotional eating can be defined as “eating in a response to negative emotions.” With an estimated 75% of overeating caused by emotional eating, more people are turning to food as a coping mechanism. Binge eating involves eating copious amounts of food in a discrete time period while feeling a loss of control over food consumption. It is often caused by poor body image, use of food to deal with stress, and low self-esteem and dysfunctional thoughts. Both emotional eating and binge eating can lead to overconsumption of food, which may result in obesity. Among other adverse health outcomes, obesity increases the risk for high blood pressure, type II diabetes, metabolic syndrome, and cardiovascular disease.

Statistics from the National Association of Eating Disorders underscore the severity of these mental illnesses. A survey was conducted on a college campus and 86% of the women surveyed reported the onset of an eating disorder by age 20. BED occurs more frequently than Anorexia Nervosa (AN) or Bulimia Nervosa (BN), as it occurs in 1 out of every 35 adults in the United States. This equates to 3-5% of women (about 5 million) and 2% of men (about 3 million). Because BED does not involve any compensatory mechanisms such as purging in BN, individuals with BED are more likely to be overweight or obese. This vicious cycle of continuous binging can lead to obesity-related health complications such as hypertension and increased risk of developing chronic diseases. In addition, it can cause psychological damage by manifesting feelings of despair and disgust and fostering the development of poor coping mechanisms.

Research widely supports the correlating relationship between negative emotion and increased food consumption. At times of heightened stress and anxiety, people may tend to overeat in order to reduce their psychological distress. Using food as a coping mechanism to alleviate stress can lead to adverse health consequences, both physical and psychological. This disordered eating behavior, along with biochemical and psychological triggers, may lead to the development of BED and eventually obesity. Though obesity results from a variety of factors, its increasing prevalence is leading researchers to investigate the role that emotion plays in its manifestation. One theory focuses on the physiology of overeating. When eating in a stressed state in response to negative emotion, the sympathetic system is activated, thereby diverting blood away from the digestive system and creating a conflict between emotionality and natural physiological processes. In addition, chemicals such as dopamine, which are associated with positive emotions, secrete at lower levels in obese individuals. Similar to depression, anxiety, addiction, and other mental disorders, BED is associated with the mismanagement of emotion. Therefore, it is imperative to investigate the underlying psychological and biological factors to better understand emotional eating and in turn reduce the risk of escalating this poor coping mechanism into a detrimental disease.

Causes of Weight Gain in College
Though stress is hypothesized to contribute to obesity in adolescents and adults, limited research has been conducted to study the interaction between stress, weight gain, and obesity in college students. However, the same principles that attribute weight gain to stress in adults also apply to college students. For instance, increased stress has been associated with a greater preference for energy dense, high fat, and high-sweets food. College students are especially susceptible to these triggers. The academic pressure of achieving and maintaining a high grade point ratio while also participating in extracurricular activities can often be taxing and stressful. In addition, college students often have limited time and money. Therefore, many opt to eat fast or convenient food that is typically high in fat and sugar rather than taking the time to cook and consume a well-balanced meal. Furthermore many freshmen living away from home for the first time lack the knowledge or resources to cook and prepare nutritious meals since their parents may have done most of the cooking throughout their childhood. These factors make college freshmen an especially susceptible population to weight gain.

Emotional Eating During Adolescents’ Transition to College
The transition from high school to college is a time of heightened excitement, change, and in many cases escalated...
levels of stress. Adjusting to a new home, school and way of life may bring about uncertainty, anxiety, and stress. Students with poor coping mechanisms may use the consumption of food as an outlet for stress, thereby leading to unhealthy eating patterns and possibly overeating, being overweight, or obesity. One study by Wilson et al., (2015) examined the impact of body mass index (BMI) as a moderator of stress and emotional eating in adolescents transitioning to college. The study focused on how perceived stress and stress coping resources predicted emotional eating. Wilson acknowledged that the “Freshman 15” phenomenon, the perceived tendency of college freshmen to gain 15 lb, is an overestimation, as findings show that college freshmen are more likely to gain 3.4 - 4 lb. She also found that contributing factors to weight gain in college freshmen include reduced physical activity, poor dietary choices, and increased alcohol consumption. In addition, she asserted that freshmen living on campus might be at a greater risk for weight gain due to the availability of on-campus food choices at all-you-can-eat dining halls.1

Research supports the findings that female college students are more susceptible to emotional eating than their male counterparts. The Wilson study examined 97 college freshmen, of which 73% were female. All participants were within the age range of 18-23 years and all had a BMI equal to or greater than 18.5. They purposely excluded those with a BMI below 18.5 because these individuals were categorized as “underweight” and were more likely to have an eating disordered pathology.1

Data collected included anthropometric measures and a demographic questionnaire. Both stress levels and resources to cope with stress were measured. In addition, The Emotional Eating Scale measured the participants desire to eat when experiencing negative emotion. Anthropometric measurements and questionnaires were collected and administered over the first four weeks of the fall semester.1

No racial differences were found when analyzing emotional eating, stress, or resources to cope. Using Pearson correlations, it was shown that exhibiting higher levels of emotional eating were significantly correlated with utilizing fewer resources to cope. Participants in the lower two BMI groups demonstrated a stronger relationship between perceived stress and BMI, compared to the higher BMI group. These results conflict with other findings demonstrating obese individuals engage in more emotional eating compared to their lower-weight counterparts.1

Overall, the study showed evidence to support the conclusion that limited coping skills may contribute to emotional eating. Although the effect of perceived stress for emotional eating in average and overweight individuals had a positive correlation, the findings for that relationship among obese individuals remains inconclusive.1 Biological and lifestyle factors, which can contribute to obesity, were not considered.

**Stress, Health Risk Behaviors, and Weight Status in Community College Students**

Community college students are an understudied population of students susceptible to stress and emotional eating. Many studies focus on four-year universities, yet students attending two-year community colleges may have even higher levels of stress and therefore a higher risk of emotional eating. Stress among community college students may be caused by financial instability or by difficulty balancing school, work, and family obligations. In addition, these students have lower healthy eating and physical activity levels, are more likely to be overweight or obese, and are more socioeconomically disadvantaged than four-year university students.6 To worsen matters, stress response-inducing hormones play a role in appetite regulation and reward seeking behaviors. This may result in increased intake of palatable foods that provide instant gratification and appease the stress response. Individuals who are already overweight or obese are more susceptible to this behavior, which may lead to further weight gain.6

Pelletier et al., (2015) examined the relationship between community college students, high stress levels, health risk behaviors, and weight status. Baseline data was acquired from 441 community college students. Eligible participants were less than 35 years of age and had a BMI of at least 20 kg/m² but less than 35 kg/m². They completed a survey measuring behavioral and psychosocial predictors of obesity in young adults and completed the Cohen Perceived Stress Scale. Height and weight data used to calculate BMI were collected and assessed.6

Approximately half of the students were overweight or obese, and the mean stress level was 5.4 (on a scale of 0-13). Those under financial strain exhibited higher stress levels and were more overweight compared to their peers. Overall, higher stress levels were shown to be associated with being overweight/obese. Aside from meal skipping, stress levels were not shown to be associated with most of the health behaviors examined in this study. Stress may either increase or decrease food intake, depending on the individual.6

**Effects of Stress and Coping on Binge Eating in Female College Students**

It is evident that there is a strong connection between negative emotion and overeating, yet the relationship between stress, coping mechanisms, and binge eating remains under-researched. One study, Sulkowski et al., (2015), examined specific coping styles and their effect on eating behaviors in female college students. Researchers surveyed 147 female college students in an educational psychology class in a Southeastern university.

Figure 1 displays the proposed connection between stress, emotional coping, and binge eating. Researchers hypothesized that emotion-focused coping (EMCOP) and rational coping (RATCOP) would be positively associated with stress and binge eating. They also anticipated that maladaptive coping styles such as avoidant and emotion-focused continued on page 15
Relationship Between Stress, Emotional Eating, and Binge Eating in College Students

would mediate the relationship between stress and binge eating. The questionnaires used in the survey included the Undergraduate Stress Questionnaire, Coping Styles Questionnaire, and Binge Eating Scale. As hypothesized, stress and binge eating were significantly and positively correlated. Surprisingly, stress was not associated with EMCOP or RATCOP. However, binge eating was significantly associated with EMCOP and avoidance coping (AVCOP). In addition EMCOP was found to partially mediate the relationship between stress and binge eating.7

Figure 1: Relationship between stress, emotional coping, and binge eating7

The results of this study support the “escape theory” of binge eating, in which psychological stress triggered by negative events or emotions results in dysphoric emotions, which are then temporarily alleviated by binge eating. This coping mechanism provides a way to temporarily escape negative emotions by decreasing negative self-awareness, thereby decreasing stress.7 However, emotion states vary by individual and depend on the time relative to a binge-eating episode.

Stress clearly plays an influential role in the onset and exacerbation of binge eating. In addition, psychosocial adversity tends to increase the consumption of highly palatable foods, which are typically high in fat and/or sugar.8 Chronic intake of these foods can alter dopamine-signaling changes in the brain, which, over time, promote binge-like eating patterns of consumption. The increasing availability of highly palatable, processed food is an environmental contributing factor to binge eating. Binge eating is more common in women, and the most pronounced increases in morbidity occur in women.8

Eating Motives

Certain research supports the claim that BED and emotional eating is comparable to addiction disorders in that they share similar pathologies. These disorders involve the activation of brain reward pathways and loss of control intake. Eggert et al., (2007) interviewed participants with a history of drug and alcohol abuse. Similar to emotional eating, these participants described their substance abuse as a way to distract from or cope with insecure attachments.5 Another study of obese women with BED concluded that only highly palatable foods elicited feelings of loss of control in overeating.6 Despite these findings, research remains inconclusive as to whether or not everyone with BED is addicted to food. As with most diseases, evidence suggests that genetic factors influence the susceptibility to BED. Exploring various eating motives may also help to explain the reasoning behind consumption of highly palatable foods. Eating motives including coping, reward enhancement, social, and conformity roles were studied in 192 undergraduates using the Palatable Eating Motives Scale (PEMS). Coping was associated with higher BMI and binge eating severity. Conformity was less but still significantly associated with binge eating severity and failure-based stress.5 Other risk factors for BED include deficits in cognitive and emotional functioning.10 Understanding these motives could be the key to finding preventative measures and treatment options for those susceptible to BED.

Conclusion

In conclusion, stress is just one of the many contributing psychological, physiological, and environmental factors attributed to emotional eating and binge eating, particularly in college students. Using food as a source of comfort and a coping mechanism triggers biochemical and psychological alterations to stimulate brain reward systems. If escalated, emotional eating can lead to BED, unhealthy weight gain, and even obesity. College students are an especially susceptible population to this vicious cycle. By further investigating the pathology and mechanisms behind emotional eating, binge eating, and stress, researchers may discover preventative measures and treatment options to prevent the adverse consequences associated with these unhealthy eating patterns.

About the Author

Valerie Della Longa graduated from Texas A&M University in December 2015 with a B.S. in Nutritional Sciences. She is currently applying to dietetic internship programs and hopes to obtain a Master of Public Health Degree. Valerie is interested in the areas of eating disorders and culinary nutrition. She is an active member of the Behavioral Health Nutrition DPG, Vegetarian Nutrition DPG, and Food and Culinary Professionals DPG. Valerie can be reached at v.dellalonga@gmail.com.

Literature Cited

Relationship Between Stress, Emotional Eating, and Binge Eating in College Students

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### In the BHN Pipeline!

#### Calls for Proposals

We are seeking presentation proposals for both the topics of Eating Disorders and Intellectual and Developmental Disabilities. If you are interested please complete the following information form ([http://www.bhndpg.org/wp-content/uploads/2016/01/Calls-for-Proposals-Generic.pdf](http://www.bhndpg.org/wp-content/uploads/2016/01/Calls-for-Proposals-Generic.pdf)) by February 26th and submit to info@bhndpg.org. Please be sure to attach your CV or Resumé. The Webinar Proposal review committee will review all proposals and you will be notified of acceptance by email by March 25th.

#### BHN Collaboration Efforts

As Sponsorship chair, Dana Magee, RD, LD, CLT is currently putting together sponsors for the 2016 calendar year. BHN is looking forward to working with companies that offer products and services that align with the population we serve and fit our mission and ideals. The expo at FNCE® this year was chock full of potential sponsors so we are looking forward to finding out how we can best collaborate!

#### Students Wanted!

For students looking to gain writing practice and connect with other students, the BHN Student Blog is the place to be! Check out #BHNStudents at bhndpgstudents.wordpress.com, or email studentblog@bhndpg.org for more information.

#### New Fact Sheets!

BHN Publications team is hard at work to offer new fact sheets for member use. Here’s a glimpse at where they are at:

**Ready for Print:**
- Eating Assistance for Adults with Developmental Disabilities
- Prader Willi for Children
- Rett Syndrome
- Feeding Children with Developmental Disabilities

**In Review Process:**
- Pica
- Prader Willi for Adults
- Obtaining Body Weight for Developmental Disability clients (professional)
- Schizophrenia

**In Approval Stages:**
- Spina Bifida
- Stress Management

**Ready to Author:**
- Guidelines for new RDN in Eating Disorders Field
- Orthorexia

#### BHN Social Media

We love to know what our members are up to, so use the #BHNPresents and tag us so we can support you on social media! Stay connected with BHN on social media:
- Facebook: Behavioral Health Nutrition (BHN)
- Instagram: @BHNDPG
- Pinterest: @BHNDPG
- Twitter: @BHNDPG

#### Resource Professionals Update

The BHN electronic mailing list (EML) has been much more active and at least 8 new members have been joining monthly. Get on board to discover what you have been missing! Recent topics of discussion included “how to deal with someone who refuses to eat,” “inpatient eating disorder experiences,” and “RDs working in detox facilities, what’s expected.”

Dementia/Alzheimer’s section of Nutrition Care Manual is being updated by Lester Rosenzweig, MS, RDN, CDN and Dawna Mughal, PhD, RDN, LDN, FADA, FAND in coordination with the National Task Group on Intellectual Disabilities and Dementia Practices (NTG). The task group is also working on extensive guidelines in this area, including nutrition. The NTG is supported by the American Academy of Developmental Medicine and Dentistry and the Rehabilitation Research and Training Center on Developmental Disabilities and Health at the University of Illinois at Chicago and other partners, such as the Center on Excellence in Aging at the University at Albany and the Gerontology Division of the American Association on Intellectual and Developmental Disabilities.

#### BHN Coming Near You

BHN Member Meet up at the 2016 iaedp Symposium; Amelia Island, Florida on Friday, February 19th at 8:15am at the conference hotel lobby.
Let’s Work Together

Eating Disorder Recovery Specialists (EDRS) is the first in-home and community based eating disorder recovery support program for individuals suffering from harmful eating behaviors. EDRS provides supplemental meal support, clinical coaching, therapeutic exposures, life skills, and in-home cooking to clients who struggle with and are recovering from eating disorders. The EDRS team is composed of clinically-trained professionals, including licensed therapists and registered dietitians who have expertise in eating disorders, as well as a personal connection to recovery.

Let’s work together to help clients create a meaningful life outside of the eating disorder.

Sincerely,

Greta Gleissner  
Ashley Anderson

Greta Gleissner  
Co-founder and Executive Director  
Ashley Anderson  
Co-founder and Director of Operations

EatingDisorderSpecialists.com  
866.525.2766 • info@eatingdisorderspecialists.com

This message is part of an Eating Recover Center - BHN agreement that includes an ad in the BHNewsletter.
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**Behavioral Health Nutrition Executive Officers 2015-2016**

**Mission:** Empowering BHN members to excel in the areas of Addictions, Eating Disorders, Intellectual and Developmental Disabilities and Mental Health by providing resources and support.

**Vision:** Optimizing the physical and cognitive health of those we serve through nutrition education and behavioral health counseling.

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**A complete list of BHN Executive Committee members and volunteers is available at www.bhndpg.org.**

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Contribute an article or topic for future BHN Newsletter issues!

Contact newslettereditor2@bhndpg.org or one of the BHN leaders listed in this newsletter.