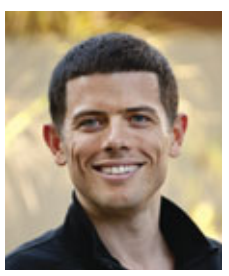


BHN: Fuel Your Brain, Feel Your Best!



David A. Wiss, BA, CPT



Renée Hoffinger, MHSE, RD

Food Addiction - Past, Present, Future

David A. Wiss, BA, CPT
Renée Hoffinger, MHSE, RD



Introduction

Obesity—does it stem from high-risk people or high-risk foods? Overeating—is the problem behavioral or substance-related? Just as the answers to these issues are multifactorial, “food addiction” has similar complexities. In December 2012, a PubMed search of the phrase “food addiction” yielded 85 citations- and 77 were published just since 2007. Research on food addiction is complex as it draws attention to Binge Eating Disorder (BED), compulsive overeating, and the epidemic of obesity. According to the American Society of Addiction Medicine (ASAM), “addiction is a primary, chronic disease of brain reward, motivation, memory, and related circuitry” (1). Thus ASAM recognizes food as having addictive potential. However, the term “addiction” has not been recognized by the Diagnostic and Statistical Manual of Mental Disorders (DSM), though disorders falling under the addiction umbrella are dispersed throughout the manual. For example, BED is categorized under Eating Disorder Not Otherwise Specified (EDNOS) in the current DSM-IV-TR (2), and will be reclassified into its own category in the new DSM-V due for publication in May 2013. Most experts describe BED as binge eating without the compensatory purge behaviors characteristic of Bulimia Nervosa. Compulsive overeating is another clinical entity often used interchangeably with BED but has some distinct differences including habitual eating or “grazing”

throughout the day. A proposed new category of “Addiction and Related Disorders” in the DSM-V will include behavioral addictions, such as disordered gambling (3). The Food Addiction Institute (FAI) is working diligently to convince the American Psychiatric Association to include food addiction as a substance-related disorder in the DSM-V (4).

Background and History

Food addiction is a controversial term and is not explicitly equated with binge eating or obesity. But without specific diagnostic criteria that allows insurance reimbursement for treatment, health professionals have less incentive to treat patients suffering from food addiction. Not surprisingly, many doctors, dietitians, and therapists remain misinformed about the problem of food addiction. Proponents of Intuitive Eating state that current measurements of food addiction likely capture the effects of compulsive eating or “rebound dieting from chronic dieting” (5). By all accounts, the number of people considered to be addicted to food is increasing. The Carbohydrate Addict’s Diet, published in 1991, included The Carbohydrate Addict’s Test and became a national bestseller (6). *Anatomy of a Food Addiction* remains a classic text describing the drug-like effects that certain foods have on particular individuals as influenced by their brain chemistry (7). Anne Katherine affirms: “a food addict knows which foods hold a charge and which do not” (p. ii) and that “the same food can be non-addictive in small doses and highly addictive when too much is eaten” (p. iv). While the treatment for individuals diagnosed with eating disorders is often to eat all foods in moderation, food addiction treatment works towards abstinence from offending “drug foods” (8). This approach is controversial because it is well



SPRING 2013 INSIDE this issue

- 2 From The Chair
- 7 Changing the Stigma of Mental Illness
- 9 Successful Nutrition and Health Promotion for Adults with IDD Living in the Community
- 12 Registered Dietitians’ Service to Group Homes for Adults with Developmental Disabilities
- 14 Communication, Collaboration and Documentation: Teamwork to Improve Outcomes when Working with Clients with Eating Disorders
- 15 In the BHN Pipeline!
- 16 Student Corner: Exercise Compulsion and Eating Disorders: Too Much of a Good Thing
- 17 In Search of Evidence
- 19 BHN-DPG Delegate’s Report
- 20 BHN DPG Executive Officers

BHNewsletter is published quarterly (Winter, Spring, Summer, Fall) as a publication of Behavioral Health Nutrition, a dietetic practice group of the Academy of Nutrition and Dietetics. All four issues are published electronically; members receive an email announcement and link for direct access. Newsletters are available on the BHN Website at www.bhndpg.org.

CPE Credit: *BHNewsletter* offers at least one CPE article with each publication. CPE articles, test questions and certificates are available at www.bhndpg.org. *BHNewsletter* also falls under the Professional Portfolio Guide's CPE Section-200 Professional Reading for peer reviewed, science-based articles equivalent to one-half (0.5) CPE if read within 5 years of publication.

Address Changes and Missing Issues: Contact the Academy of Nutrition and Dietetics with your new address information. If you missed an issue, contact newsletter@bhndpg.org or the newsletter editor.

Advertisement Policy: BHN accepts advertisements for the quarterly newsletter. Ads are subject to approval of the editorial board. For guidelines and fee schedule contact the editor at newsletter@bhndpg.org.

Advertisements should not be construed as endorsement of the advertiser or product by the Academy of Nutrition and Dietetics or by BHN.

Submissions: Articles about successful programs, research, interventions and treatments, meeting announcements and educational program information are welcome and should be forwarded to the editor by the next deadline.

Future Submission Deadlines

Summer 2013..... May 1, 2013

Fall 2013..... August 1, 2013

Editor:

Diane M Spear, MS, RD, LD
newsletter@bhndpg.org

Assistant Editors:

Angela Lee, MS, RD

Caroline Yoder, Student

Newsletter Review Board:

Therese Shumaker, MS, RD, LD

Karen Wetherall, MS, RD, LDN

Ellen Griffiths, RD, LDN, MPH

Susan DuPraw, MPH, RD
DPG Relations

Individuals not eligible for Academy of Nutrition and Dietetics membership may apply to become a "Friend of BHN" for the subscriber cost of \$50.00. A check or money order should be made payable to ADA/DPG #12 and sent in care of the BHN Treasurer (see officer contacts in this newsletter).

Copyright 2013 BHN. All rights reserved.

The BHN Newsletter may be reproduced only by written consent from the editor. Direct all requests to newsletter@bhndpg.org.

From the Chair

Therese Shumaker, MS, RD, LD



Greetings BHN members!

What a great year this has been! This is my last letter to you as the Chair of the Behavioral Health Nutrition practice group! It was my hope at the beginning of last June that we could get the practice group more exposure, and attract more members; thus the theme "BHN Everywhere". I think we are making progress. We currently have 1687 members and 356 of those are students. We have a group of highly motivated individuals on the Executive Committee (EC) and other volunteers who have been working really hard to get you what you want and need for your membership in BHN.

We still have things that need to get done. We are planning to form a committee soon to start working on updating the psychiatric nutrition resource manual. Thanks to all of you who have expressed an interest in helping with this. We have also made a commitment to the Academy to start developing the SOP/SOPP for Addictions. These will be big projects for the upcoming year, and if you have not done so already, and are interested in being involved send me a note with what your interests are.

I hope that you have been able to take part in some of our webinars that we offered this past year. We are looking for a webinar coordinator to join our team! If you are interested in becoming a part of the BHN team, and have an interest in setting up webinars that we offer throughout the year, I would love to hear from you and give you more details about the position. shumaker.therese@mayo.edu

For the first time BHN is sending two of our EC members to the California Dietetic Association. These members will be hosting a booth, exposing the hundreds of dietetic professionals who attend to our practice group. If you are going to be attending the conference and want to be a part of an off-site meet-and-greet session that BHN will be hosting, contact one of our representatives David or April. david.wiss.65@my.csun.edu or april@choosetochangenutrition.com

Also look for the new BHN banner - with our new image and tagline "Fuel your brain, Feel your best".

This newsletter has something for everyone! Check out the articles and think about writing one for the BHN newsletter in your area of expertise. We are a unique practice group with four different practice areas, but in one way or another they all overlap. This newsletter theme, *BHN Past, Present, Future*, touches on issues and trends in the evolving practice of nutrition and dietetics in behavioral health. The CPE article by Wiss and Hoffinger on the topic of food addiction provides an excellent case for possible inclusion in the DSM-V as a substance-related disorder. Intellectual and developmental disabilities (IDD) focused articles discuss the supports approach to nutrition education and the role of registered dietitians in the health of adults with IDD who live in community-based group homes. The eating disorders focused article provides excellent guidance on the challenges of documentation, teamwork and reimbursement. The article on "Changing the Stigma of Mental Illness" by Tegan Medico is a great read, and is something that as Dietitians working in the behavioral health field we all have a responsibility in helping to "understand the implications of mental illness for the interventions that we as dietetic professionals develop, implement and evaluate".

BHN Elections are completed. BHN has a new chair elect, Sharon Lemons, MS, RD, LD, treasurer, Lester Rosenzweig, MS, RD, CDN, and nominating committee member, Kathleen Putman, MS, RD. I would like to ask you to consider running for an office or getting involved with BHN as a volunteer. I guarantee that you will meet some great people who are enthusiastic and committed to the areas that they work in. The very first time I met some of you, I knew immediately that I belonged with you all, and it has been a great pleasure to serve as your Chair! Thank you for giving me the opportunity.

Food Addiction...

continued from page 1

known that food restriction can be a risk factor for binge eating. For example, animal studies have shown that food restriction increases the sensitivity of neural substrates for reward and stimulant effects of abused drugs (9).

Reciprocal relationships of food with other substances raise the possibility that food and classic addictive substances compete for the same brain pathways (10). Higher food consumption has repeatedly been reported in patients recovering from substance use disorders (11) and this may imply “substance substitution”. Additionally, increased food consumption may be due to “rebound appetite” in the wake of the hypothalamic suppression from drug use.

More than 30 years ago, the Rader Institute in California was one of the first inpatient treatment centers to accept patients with food addiction and treat it as a chemical dependency (8). During the 1980s and 1990s, Glenbeigh Hospital in Tampa, FL and other centers addressed food addiction, but no longer market such services. In the 1990s, the psychodynamic model of addiction treatment gained widespread acceptance but health insurance reimbursement was soon withdrawn for food addiction diagnosed as chemical dependency (8). Meanwhile in 1985, the Overeaters Anonymous (OA) HOW program adopted the principle of specific food abstinence (refined carbohydrates) and offered rehabilitation services at no charge. The acronym HOW stands for Honesty, Open-mindedness, and Willingness, which are commonly referred to as “the essentials of recovery.” The first OA meeting was held over 50 years ago, and the concept of “abstinence” that was adopted from Alcoholics Anonymous. Abstinence then referred to avoidance of all food consumption between three set meals, in other words, total abstinence from compulsive eating (12). Many consider OA to be less rigid about abstinence than OA-HOW because OA does not endorse any one specific plan of eating but rather individualized plans, often-

times in consultation with physicians and dietitians. Other food-based 12-Step programs include Compulsive Eaters Anonymous, Greysheeters Anonymous, Food Addicts Anonymous, and Food Addicts in Recovery Anonymous. Meanwhile, Eating Disorders Anonymous states that: “balance – not abstinence – is our goal” (13).

Food Addiction in the Popular Press

Before reviewing food addiction in the scientific literature, it is important to recognize that the general public receives most of its information about “food issues” from secondary sources, or “gray literature”. While such resources often come from reputable professionals with advanced degrees, they may lack peer-review and are often driven by profit from the lucrative “diet book” industry. Dr. David Kessler’s *The End of Overeating* (14), a New York Times best-seller, cleverly avoids the term “food addiction” and introduces the term “hyperpalatable” (p. 14) when referring to sugar-, salt-, and fat-enhanced foods leading to what he calls “conditioned hypereating” (p.135). When discussing individual clients, Kessler, states: “They don’t have any of the eating disorders we’ve learned to recognize and treat, but food is never far from their minds. And once they begin eating, they can’t seem to stop. Long after they’ve ceased to feel hungry, they’re still eating. No one has ever explained what’s happening to them and how they can control their eating” (14). Kessler recommends planned eating with no room for deviation in the beginning stage, a type of discipline that is essential for recovering addicts.

Pam Peeke, MD, MPH, author of *The Hunger Fix*, asserts that food addiction is real (15). She coins the term “False Fixes” (p. xiii) to describe the use of food to fix unpleasant feelings. From her perspective, stressing “moderation” to addicts is a moot point because when addiction is in full swing, prefrontal cortex function is severely impaired (16). Food addicts will go to extraordinary lengths to obtain their “False Fix”. Expecting a food addict to kick their habit by examining

food labels is like expecting a crack addict to get clean after attending a lecture on the dangers of cocaine. According to Peeke, most food addicts require a detox stage, recovery stages, and an overall eating plan. It also includes reasonable transitions between stages in preparation for life-long recovery. The focus of this approach is on increased vigilance rather than diet liberalization. The message to practitioners in weight management is that merely advising overweight or obese individuals to “get it together,” “stop eating so much”, or “become an intuitive eater” is not practical in light of advances in the science of food addiction (15).

Food Addiction – The Evidence

Dopamine (DA) is a catecholamine neurotransmitter that is critical to movement, motivation, reward, and overall well-being. The role of DA in brain reward mechanisms and addictive behavior has been well established, particularly the DA D2 receptor sites (17). Researchers describe a “reward deficiency syndrome” that leads to aberrant substance seeking behavior (including food) and may have a genetic component influencing susceptibility to substance abuse. By examining multiple DNA tests, investigators have furthered the biological understanding of reward deficiency syndrome. Sugar is particularly important because of its connection to opioid release and dopamine systems (18). Volkow, Fowler, and Wang (19) reviewed imaging studies of the brain using Positron Emission Tomography (PET) in an attempt to explain DA-related neurobiological factors that influence addictive human behavior, specifically the loss of control that leads to compulsive intake of a substance. Their results highlight the need for pharmacological *and* behavioral interventions in the treatment of addiction. Other researchers (20) have proposed that sugars and fats could affect the central reward systems via regulatory neuropeptides, thereby increasing food intake. Volkow and colleagues reviewed additional PET scans and concluded that several brain circuits beyond DA are important in the neurobiology of addiction, specifically circuits involved

Food Addiction...

continued from page 3

with conditioning/habits, motivation, and executive functions such as inhibitory control and decision-making (21).

Salamone and Correa challenged the simplified DA hypothesis of “reward,” stating that an accepted scientific definition of reward has not been established (22). Several authors have questioned the widely accepted research methods used to explain DA neuron activity and have proposed alternative views of dopamine pathways that include behavioral functions associated with learning, motivation, emotion, or stress. From an evolutionary perspective, calorically dense foods and food-related stimuli have created an “evolutionary mismatch,” where the act of dieting can stimulate the natural physiological response to food scarcity and ultimately lead to rebound overeating (22). Other authors prefer to emphasize the behavioral control of food intake, while considering the metabolic and hormonal adaptations that have substantial effects on body weight. Abstinence is an important goal in treating drug addiction, but this approach is less realistic for treating food addiction (23). Overeating may be viewed as a food addiction in a small subgroup of obese individuals, but at present, it may be better classified as a behavioral addiction, as the neuroscience evidence in humans is inconsistent and sometimes conflicting (3,24).

At the 2012 Food and Nutrition National Conference (FNCE), Dr. Wang discussed food and addiction in the light of PET imaging research and stated that compulsive overeaters share many of the same imaging characteristics as drug addicts (25). Obese subjects were found to have DA receptor deficiencies similar to drug users, perpetuating pathologic overeating as compensation for the decreased activation of the reward system. Current evidence supports the role of dopamine neurotransmission in mediating “food motivation” in the human brain and may explain excess food consumption in subjects with binge eating disorder. Wang reported that binge eaters had

significantly greater DA release than non-binge eaters. Dopamine D2 receptor-mediated dysregulation of regions implicated in inhibitory control may explain the inability of obese subjects to control their food intake despite conscious attempts to do so. Wang also recognized that in addition to hedonic (reward) signals that control food intake, intrinsic factors (hormonal), emotional factors (stress), and extrinsic factors (food-related cues and availability) all impact the complex computation of nutritional need in the hypothalamus. Additional research exploring the effects of food advertisements and other visual or olfactory cues in specific brain regions implicated in craving may be warranted (26).

At the Food and Addiction conference at Yale University (July 2007), leading researchers in nutrition, obesity, endocrinology, and neurobiology, including experts in the field of addiction, debated the strengths, weaknesses, and merits of the food addiction hypothesis. The Rudd Center for Food Policy and Obesity at Yale, as well as researchers at the McKnight Brain Institute at the University of Florida College of Medicine, are at the forefront of this movement. The Yale Food Addiction Scale (YFAS) was developed in 2008 and has since been internally and externally validated. The YFAS has been useful in predicting binge-eating behavior as measured by the Binge Eating Scale (27). A subsequent study classified food addiction in 57% of obese BED patients, suggesting the existence of a more complicated subset within the spectrum of BED patients (28).

Abnormal desire for sweet, salty, and fatty foods has been documented in obese adults throughout numerous studies and has been validated with YFAS (29). Diagnostic scoring using YFAS is based on seven symptoms in the DSM-IV-TR criteria for substance dependence and includes withdrawal, tolerance, and continued use despite negative consequences. Investigators utilizing the YFAS found that food addiction was similar to chronic drug addiction in that craving individuals do not expect positive reinforcement after

consuming the substance (30). Another study using the YFAS concluded that the pathologies associated with addiction could make adoption of healthful eating habits more difficult, which may undermine efforts to lose weight (31). Several authors continue to recommend incorporating substance abuse treatment strategies to improve the success rate in the battle against overeating and obesity (32). Jessica Setnick, MS, RD recommends abstinence from offending behaviors over abstinence from offending foods— a hallmark of classic eating disorder treatment (33). FitRx is a multidisciplinary state-of-the-art physical wellness and weight-loss facility in Brentwood, TN that incorporates behavioral health principles including meal support, nutrition education, cooking classes and daily exercise (34). Recent trends indicate growth in the private sector treatment for BED patients, many who also fit the criteria for food addiction. ACORN Food Dependency Recovery Services markets structured residential workshops worldwide that promote food abstinence through 12-Step recovery (35).

Experts from nutrition and obesity disciplines appear to be more reluctant than addiction experts to accept the notion that some foods have addictive properties in select individuals. In their text *Food and Addiction* Brownell and Gold (36) emphasized that the word “and” in the title has profound implications. Rather than attempting to establish whether food addiction exists, these authors successfully explore the impact of food on the brain of everyday people in everyday life. “Food addiction” addresses the individual “food addict” while the concept of “food and addiction” has public health implications. Regardless, the term “addict” is associated with negative social stigmatization. “The key question is whether enough foods produce enough of an addictive effect on enough people to affect the health of the population” (p. xxii). Brownell and Gold conclude: “Food can act on the brain as an addictive substance. Certain constituents of food, sugar in particular, may hijack the brain and

Food Addiction...

continued from page 3

override will, judgment, and personal responsibility, and in so doing create a public health menace" (p. 439). Mayor Michael Bloomberg of New York City recently outlawed the sale of "super-sized" sugary drinks due to public health concerns.

Conclusions

A position paper by the Academy of Nutrition and Dietetics concluded that all foods can fit within a healthful eating style if consumed in moderation with appropriate portion size and combined with regular physical activity (37). This is known as the "Total Diet Approach" that rejects labeling foods as "good" and "bad" because it is believed to foster unhealthy eating behaviors. This approach takes the focus away from individual foods unless they are contraindicated by an extenuating circumstance such as renal failure. The Academy addressed the plausibility of food addiction in a recent position paper on the use of nutritive and non-nutritive sweeteners, by stating that a sugar addiction present in humans has not been proven (38). This 2012 position paper is currently the only resource available through The Academy's Evidence Analysis Library (EAL) that makes any mention of the food addiction controversy.

In the ongoing battle between the homeostatic system (energy balance) and the hedonic (reward) system, the reward system is winning. Although humans need food to survive, we do not need the excessive amounts of hyperpalatable food combinations such as those prevalent in contemporary diets. Notwithstanding, it is important to remember that acceptance of food addiction in popular culture does not make the concept viable and valid, nor does clinical anecdote. The empirical evidence on food addiction in humans is in its infancy and considerable controversy remains. More research is needed, and a defensive posture from the food industry, similar to that of Big Tobacco in the smoking debate, is to be expected. Of particular importance will be the role of public policy in improving

the food environment by decreasing the availability of potentially addictive foods during childhood, a crucial period of brain development. Finally, reclassifying some obese individuals as having an addictive disorder would necessitate policy changes that may be instrumental in addressing the obesity epidemic (39).

The conclusions of the Rudd Report (10) stated that "future efforts related to food and addiction should include strong recommendations that funding agencies increase support of work in this area, especially in support of young investigators". This should be a call to duty for dietitians active in Behavioral Health Nutrition (BHN) to be aggressive in pursuing involvement in the food addiction research movement and the practical implications that may portend.

About the Authors

Author: David Wiss is a graduate student and Dietetic Intern at California State University, Northridge. For the past year he has served as the BHN Student Liaison Committee Chair and active member of the BHN Public Relations Team. Mr. Wiss plans to pursue research related to food and addiction, bridging the gap between RD's and the field of addiction. Contact him: davidawiss@nutritioninrecovery.com, LinkedIn: David A, or Twitter: @DavidAWiss.

Co-Author: Renée Hoffinger, MHSE, RD, is BHN's Addictions Resource Professional and author of The Recovery Diet. For nearly 20 years, Renée has served on the Substance Abuse Treatment Team at the North Florida/South Georgia Veteran Health System in Gainesville, Florida pioneering hands-on nutrition education. Renee can be contacted at renee.hoffinger@gmail.com.

References

1. American Society of Addiction Medicine (2012). *Definition of addiction*. Retrieved from <http://www.asam.org/for-the-public/definition-of-addiction>
2. American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: American Psychiatric Association.
3. Albayrack, O., Wolfle, S. M., & Hebebrand, J. (2012). Does food addiction exist? A phenomenological discussion based on the psychiatric classification of substance-related disorders and addiction. *Obesity Facts*, 5, 165-179. doi:10.1159/000338310
4. Food Addiction Institute (2012a). *Food addiction as part of the obesity epidemic*. Retrieved from

5. Tribble, E. (2011). *Can you really be addicted to food?* Retrieved from <http://www.intuitiveeating.org/content/can-you-really-be-addicted-to-food>
6. Heller, R. F., & Heller, R. F. (1991). *The carbohydrate addict's diet*. New York, NY: Penguin Books.
7. Katherine, A. (1991). *Anatomy of a food addiction (3rd ed.)*. Carlsbad, CA: GurzeBooks.
8. Food Addiction Institute (2012b). *A history of food addiction treatment*. Retrieved from http://foodaddictioninstitute.org/Publications/History_of_Food_Addiction_Page3.html
9. Cabeza de Vaca, S., & Karr, K. D. (1998). Food restriction enhances the central rewarding effect of abused drugs. *The Journal of Neuroscience*, 18(18), 7502-7510.
10. Rudd Report (2007). *Food & Addiction. Conference on Eating and Dependence*. Symposium conducted at the meeting of The Rudd Center for Food Policy and Obesity, Yale University, New Haven, CT. Retrieved from <http://www.yaleruddcenter.org/resources/upload/docs/what/reports/RuddCenterAddictionMeeting.pdf>
11. Nolan, L. J., & Stolze, M. R. (2012). Drug use is associated with elevated food consumption in college students. *Appetite*, 58, 898-906. doi:10.1016/j.appet.2012.02.014
12. Beyond Our Wildest Dreams (2005). Rio Rancho: NM: Overeaters Anonymous, Inc.
13. Eating Disorders Anonymous (2012). Retrieved from <http://www.eatingdisordersanonymous.org/about.html>
14. Kessler, D. A. (2009). *The end of overeating*. New York, NY: Rodale Inc.
15. Peeke, P. (2012). *The hunger fix*. New York, NY: Rodale.
16. Goldstein, R. Z., & Volkow, N. D. (2011). Dysfunction of the prefrontal cortex in addiction: Neuroimaging findings and clinical implications. *Nature Reviews Neuroscience*, 12(11), 652-669. doi:10.1038/nrn3119
17. Blum, K., Sheridan, P. J., Wood, R. C., et al. (1996). The D2 dopamine receptor gene as a determinant of reward deficiency syndrome. *Journal of the Royal Society of Medicine*, 89, 396-400.
18. Avena, N. M., Rada, P., & Hoebel, B. G. (2008). Evidence for sugar addiction: Behavioral and neurochemical effects of intermittent, excessive sugar intake. *Neuroscience and Biobehavioral Reviews*, 32(1), 20-39. doi:
19. Volkow, N. D., Fowler, J. S., & Wang, G. J. (2003). The addicted human brain: insights from imaging studies. *Journal of Clinical Investigation*, 111, 1444-1451. doi:10.1172/JCI200318533
20. Levine, A. S., Kotz, C. M., & Gosnell, B. A. (2003). Sugar and fats: The neurobiology of preference [Special section]. *Journal of Nutrition*, 831S-834S.
21. Volkow, N. D., Wang, G. J., Fowler, J. S., Tomasi, D., & Telang, F. (2011). Addiction: Beyond dopamine reward circuitry. *Proceedings of the National Academy of Sciences*, 108(37), 15037-15042. doi:10.1073/pnas.1010654108
22. Salamone, J. D., & Correa, M. (2012). Dopamine and food addiction: Lexicon badly needed. *Biological Psychiatry*. Advance online publication. doi:10.1016/j.biopsych.2012.09.027
23. DiLeone, R. J., Taylor, J. R., & Picciotto, M. R. (2012). The drive to eat: Comparisons and distinctions between mechanisms of food reward and drug addiction. *Nature Neuroscience*, 15(10). doi:10.1038/nn.3202
24. Ziauddeen, H., & Fletcher, P. C. (2012). Is food addiction a valid and useful concept? *Obesity Reviews*. doi:10.1111/j.1467-789X.2012.01046.x
25. Wang, G. J. (2012, October). Can people get addicted to palatable food? *Food and Nutrition Conference and Expo*. Symposium conducted at the meeting of The Academy of Nutrition and Dietetics, Philadelphia: PA.
26. Fortuna, J. L. (2012). The obesity epidemic and food addiction: Clinical similarities to drug

Nutrition, Genetics...

continued from page 5

- dependence. *Journal of Psychoactive Drugs*, 44(1), 56-63. doi:10.1080/02791072.2012.662092
27. Gearhardt, A. N., Corbin, W. R., & Brownell, K. D. (2009). Preliminary validation of the Yale food addiction scale. *Appetite*, 52, 430-436. doi:10.1016/j.appet.2008.12.003
28. Gearhardt, A. N., White, M. A., Masheb, R. M., Morgan, P. T., Crosby, R. D., & Grilo, C. M. (2012). An examination of the food addiction construct in obese patients with binge eating disorder. *International Journal of Eating Disorders*, 45, 657-663. doi:10.1002/eat.20957
29. Davis, C., Curtis, C., Levitan, R. D., Carter, J. C., Kaplan, A. S., & Kennedy, J. L. (2011). Evidence that 'food addiction' is a valid phenotype of obesity. *Appetite*, 57, 711-717. doi:10.1016/j.appet.2011.08.017
30. Meule, A., & Kubler, A. (2012). Food cravings in food addiction: The distinct role of positive reinforcement. *Eating Behaviors*, 13, 252-255. doi:10.1016/j.eatbeh.2012.02.001
31. Burmeister, J. M., Hinman, N., Koball, A., Hoffman, D. A., & Carels, R. A. (2013). Food addiction in adults seeking weight loss treatment. Implications for psychosocial health and weight loss. *Appetite*, 60, 103-110. doi:10.1016/j.appet.2012.09.013



CPE credit (1 hour) is available from BHN for the full text version of the article, **Food Addiction: Past, Present, Future.**

Access the article at <http://bhndpg.org/index.asp> and <http://www.bhndpg.org/moa/cpes.asp> for reading/taking quiz.

32. Pretlow, R. A. (2011). Addiction to highly pleasurable food as a cause of the childhood obesity epidemic: A qualitative internet study. *Eating Disorders*, 19, 295-307. doi:10.1080/10640266.2011.584803
33. Setnick, J. (2012). *Adapting addiction concepts to overeating*. Retrieved from http://www.understandingnutrition.com/store/item_view.asp?estore_itemid=1000116
34. FitRx (2012). Retrieved from <http://www.fitrxbrentwood.com/program-options/a-day-in-the-life>
35. ACORN Food Dependency Recovery Services (2012). Retrieved from <http://www.foodaddiction.com/Services.htm>
36. Brownell, K. D., & Gold, M. S. (2012). *Food and addiction*. New York, NY: Oxford University Press.
37. Academy of Nutrition and Dietetics (2007). Position of the American Dietetic Association: total diet approach to communicating food and nutrition information. *Journal of the American Dietetic Association*, 107, 1224-1232.
38. Academy of Nutrition and Dietetics (2012). Position of the Academy of Nutrition and Dietetics: Use of nutritive and nonnutritive sweeteners. *Journal of the Academy of Nutrition and Dietetics*, 112(5), 739-758.
39. Allen, P. J., Batra, P. Geiger, B. M., Wommack, T., Gilhooly, C., & Pothos, E. N. (2012). Rationale and consequences of reclassifying obesity as an addictive disorder: Neurobiology, food environment and social policy perspectives. *Psychology and Behavior*, 107, 126-137. doi:10.1016/j.physbeh.2012.05.005

Congratulations to BHN's Newly Elected Officers for the 2013-2014 Year!

Chair-Elect:

Sharon Lemons, MS, RD, LD

Treasurer:

Lester Rosenzweig, MS, RD, CDN

Nominating Committee:

Kathleen Putnam, MS, RD

Consider joining the BHN Executive Committee in one of these volunteer positions:

- Publications Chair
- Webinar Coordinator
- Assistant Newsletter Editor
- Sponsorship Chair
- IDD Resource Professional
- Student Liaison Committee Chair
- Student Newsletter Editor

Contact Mary Kuester, MA, RD, LD
marykuester@comcast.net

BHN Making a Presence!

The BHN Social Media committee has been hard at work increasing your access to behavioral health news through Twitter, Facebook and our brand new Pinterest page! The team is really making an effort to represent all areas of BHN. Our newest team members, Kelsey Wallour and David Wiss, have created a new student group on Facebook to get students involved in BHN through writing articles and sharing resources. Another first for BHN held on March 13, 2013 – a TwitterParty!

The outreach doesn't stop with social media! In April 2013, BHN will be making a presence at the California Dietetic Association Conference. There is also a plan to reach out to addiction treatment centers to promote the inclusion of the Registered Dietitian in substance abuse treatment. Registered Dietitians will be encouraged to take aggressive action in becoming integrated members of the treatment team, in both public and private settings. BHN is reaching out to private facilities to let them know that there are professionals who are developing expertise in different areas of addiction (for more information contact davidawiss@nutritioninrecovery.com).

To get involved with these exciting changes be sure to follow us on Twitter (@BHNDPG), like us on Facebook (www.facebook.com/BHNDPG), and don't miss a future BHN Twitter Party! Details TBA.

Changing the Stigma of Mental Illness

By Tegan J. Medico, MS-MPH, RD, LDN

Transforming Treatment: Trends in Mental Health Care

During the Middle Ages, the treatment of the mentally ill in Europe took a brutal turn. If not labeled a witch or a warlock and executed as such forthright, they were discarded with other social outcasts—criminals, beggars, and the physically disabled—into rank facilities where no distinction between patient or prisoner was not. Into the early 1900s, blatant inhumanity dominated mental illness “treatment” in Europe as well as in America. However, at the same time, the emphasis on isolation shifted somewhat to cure, a trend spurred in part by growing academic interests in neuroscience and psychology, as well as notable public exposés of dismal asylum conditions (1).

The evolution of mental health care in the 20th and 21st centuries was a pendulum of change. It hosted the introduction and then antiquation of several invasive and injurious procedures such as insulin-induced comas, lobotomies, and high-voltage electroconvulsive therapy. In America, the 20th century saw institutionalization rates reach its peak, only to be followed by the deinstitutionalization movement of the 1950s-1960s (1). The arrival and rapid expansion of psychotropic medications as the dominant treatment modality occurred thanks to the development of more effective and better tolerated drugs, direct-to-consumer advertising, managed behavioral health carve-outs favoring pharmaceutical management, and the creation of Medicaid (which paid for 80% of all psychotropic medications by 2001) (1-3).

These relatively rapid changes may have been partly fueled by the establishment of large mental health advocacy groups and two pieces of landmark legislation: the National Mental Health act of 1946 which established the National Institute of Mental Health, and the Community Mental Health Act of 1963 that provided the first outlay of federal money supporting community-based services as a preferred alternative to government-run hospitals (1).

Ameliorating the suffering of those afflicted with mental illness and preserving their freedom, dignity, and autonomy, became an issue of both therapy and justice. Mental illness was no longer kept in the dark dungeons.

Though such trends reveal a less subjugated position of mental illness in American society compared to times past, whether they point to a public regard that can be characterized as embracing remains debatable. The stigma of mental illness, alive for centuries gone by, dies hard.

Shaking the Stigma

The 2007 Behavioral Risk Factor Surveillance System (BRFSS) Mental Illness and Stigma module assessed attitudes about mental illness among adults in 35 states plus the District of Columbia and Puerto Rico. Though the survey was not nationally representative, the results revealed a curious discrepancy. While 57% of respondents believed that people are generally compassionate toward those with mental illnesses, only 25% of adults with symptoms of mental illness, determined using the Kessler 6-scale of serious psychological distress, shared this belief (4). Other studies reveal that most U.S. citizens, including those practicing within the mental health profession, maintain stigmatized views of mental illness (5-8).

The most prevalent stigmatizing attitudes among Americans toward the mentally ill include: 1) “fear and exclusion,” the belief that those with severe mental illnesses are dangerous and should be separated from the general public; 2) “authoritarianism,” the belief that the mentally ill are incompetent and require others to make decisions for them; and 3) “benevolence,” the belief that those with mental illnesses require parenting-like care. Furthermore, people disabled by mental illnesses are viewed less sympathetically in terms of control over and responsibility for their limitations compared to people with physical disabilities (9).

Such stigmatizing attitudes from the public can manifest on three general levels. The first is stereotypes, which are

broad-based oversimplifications characterizing a group of people. A differentiating feature of stereo-

types is that a person may be aware of those associated with a given group but not necessarily give credence to them or readily apply the stereotypes to specific individuals belonging to the stereotyped group. Prejudice, on the other hand, occurs when a person endorses a stereotype as true; it is an evaluative attitude about a stereotype. Prejudice often includes an emotional response such as fear, anger, or hatred. The last level is discrimination, which occurs when a person acts upon a prejudice. Common patterns of discriminating behaviors toward the mentally ill include denial of care, avoidance, coercion, and segregation (9).

Mental illness discrimination has been shown to affect employment potential, housing quality, family and community relationships, and access to mental and physical health services (10-13). These discriminations happen despite protections afforded under the Americans with Disabilities Act. The National Alliance on Mental Illness (NAMI) estimates that about two-thirds of people with diagnosable mental illnesses do not seek treatment and that fear of discrimination is a main contributor. Fear of discrimination based on mental illness may be especially prevalent among minorities who are already exposed to discrimination based on their demographics. Little is known about how minority groups themselves may stigmatize mental illness within their communities (14).

In addition to being subject to stereotypes, prejudice, and discrimination, public stigma has the potential to cause people suffering with mental illnesses to internalize negative views in what is termed “self-stigma.” The impacts of self-stigma can include not seeking treatment at all, as mentioned above, and/or failing to proactively engage in the course of treatment with



Changing the Stigma...

continued from page 7

full efficacy. An alternative to the self-stigma characterized by low self-esteem and self-loathing is that characterized by righteous anger. Those burdened with mental illness who experience the latter may take actions to remedy damaging attitudes by protesting negative media portrayals of mental illness, invoking judicial reprimands and precedents, advocating for structural changes in the healthcare system, or other forms of activism (9).

Researchers analyzing 72 reports in 14 countries determined that, in addition to protest strategies, education and contact were among the most common types of change strategies employed in anti-stigma campaigns dealing with mental illness (15). Protest strategies usually are targeted at the media's role in propagating inaccuracies regarding mental illness. Though often considered useful in retracting negative attitudes toward mental illness, protest strategies do little to replace negative attitudes with positive ones, and their overall effectiveness has yet to be supported empirically. Education and contact, however, are stronger in these regards (9). Education strategies entail fostering a better understanding of mental illness among the public so that it may make informed judgments. Contact strategies entail exposing members of the public to persons with mental illness so that these persons may demonstrate their humanity and/or ability to lead functional lives.

The Registered Dietitian's Role

It is apparent that the stigma of mental illness has persisted into present-day and that it has brought numerous negative consequences yet to be rectified. The problem of mental illness stigma is not confined only to those who carry a diagnosis, however. How does the stigma of mental illness impact registered dietitians and the work they do?

Little is known about dietitians' specific attitudes toward the mentally ill or how their attitudes may or may not impact practice. Most dietitians do not work extensively in mental health settings. Yet one in 17 American adults and

one in 10 American children have a serious mental illness (e.g. major depression, bipolar disorder, schizophrenia, etc.) (16). Also, episodes of serious psychological distress (SPDs), a measure of the frequency with which mental illness imposes severe life burdens, are more common among people with chronic diseases such as diabetes, cancer, heart disease, and obesity, conditions to which dietitians regularly lend their expertise in both clinical and community settings (17). Most people with mental illnesses die of common medical conditions at life expectancies 14-32 years shorter than the general public, suggesting high acuity of illness (18). Clearly, dietitians will encounter mental illness, and the stigma that comes along with it, regularly in their practice.

With the inevitability of exposure to mental illness and mental illness stigma in a patient, client, or community, it is important to be aware when they are present and to understand the implications of mental illness for the interventions that dietitians develop, implement, and evaluate. Perhaps more research will emerge that focuses specifically on how the stigma of mental illness affects dietetics practice, but until more insight is gained, it is up to each practitioner to understand the position of mental illness and mental illness stigma in the Nutrition Care Process. Considering the aforementioned health trends observed, as well as mounting evidence linking nutrition status to mental health, the contribution of the dietitian to mental health care may become more prominent as time moves forward. If so, keeping stigmatized attitudes in check will be imperative.

About the Author

Tegan J. Medico, MS-MPH, RD, LDN, earned her BS in Nutrition/Dietetics from Indiana University of Pennsylvania in 2004 and MS in Nutrition/Public Health Nutrition and MPH in Health Planning and Administration from The University of Tennessee in 2011. She is the Resource Professional for Mental Health for the Behavioral Health Nutrition DPG and the Council on Professional Issues Chair-Elect for the Knoxville Academy of Nutrition and

Dietetics. She practices clinically at Peninsula Hospital and Acadia Village in Louisville, TN. She is available at 865-970-6319 (phone), 865-380, 1413 (fax), tmedico@covhlth.com, or [@iammorrison.com](https://www.instagram.com/teganmedico).

References

1. Public Broadcasting Station A brilliant madness: Timeline. Available at: <http://www.pbs.org/wgbh/amex/nash/timeline/index.html>. Accessed Jan. 10, 2013.
2. Druss, BG. The changing face of U.S. mental health care. *Am J Psychiatry*. 2012; 167: 1419-1421.
3. Frank RG, Conti RM, Goldman HH. Mental health policy and psychotropic drugs. *The Milbank Q*. 2005; 83(2): 271-298.
4. Centers for Disease Control and Prevention. Attitudes toward mental illness—35 states, District of Columbia, and Puerto Rico, 2007. *MMWR*. 2012; 59(20): 619-625. Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5920a3.htm#tab2>. Accessed Jan. 14, 2013.
5. Phelan JC, Link BG, Stueve A, Pescosolido BA. Public conceptions of mental illness in 1950 and 1996: What is mental illness and is it to be feared? *J Health Soc Behav*. 2000; 41: 188-207.
6. Farrell M, Lewis G. Discrimination on the grounds of diagnosis. *Br J Addict*. 1990; 85: 883-890.
7. Sriram TG, Jabbarpour YM. Are mental health professionals immune to stigmatizing beliefs? *Psychiatr Serv* 2005; 56: 610.
8. Lauber C, Nordt C, Braunschweig C, Rossler W. Do mental health professionals stigmatize their patients? *Acta Psychiatr Scand Suppl*. 2006; Supp: 51-59
9. Corrigan PW, Watson AC. Understanding the impact of stigma on people with mental illness. *World Psychiatry*. 2002; 1(1): 16-20.
10. Bordieri J, Drehmer D. Hiring decisions for disabled workers: Looking at the cause. *J Appl Soc Psychol*. 1986; 16: 197-208.
11. Link BG. Mental patient status, work, and income: An examination of the effects of a psychiatric label. *Am Sociol Rev*. 1982; 47: 202-215.
12. Segal S, Baumohl J, Moyles E. Neighborhood types and community reaction to the mentally ill: A paradox of intensity. *J Health Soc Behav*. 1980; 21: 345-359.
13. Ping Tsao CI, Tummala A, Roberts LW. Stigma in mental health care. *Acad Psychiatr*. 2008; 35: 70-72.
14. National Alliance for Mental Illness. Facts about stigma and mental illness in diverse communities. Available at: http://www.nami.org/Content/Microsites270/NAMI_Howard_County/Home258/Multicultural_Action1/StigmaandMentalIllnessinDiverseCommunities.pdf. Accessed Jan. 26, 2013.
15. Corrigan PW, Morris SB, Michaels PJ, Rafacz JD, Rusch N. Challenging the public stigma of mental illness: A meta-analysis of outcome studies. *Psychiatr Serv*. 2012; 63(10).
16. U.S. Department of Health and Human Services. *Mental Health: A Report of the Surgeon General*, Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services; 1999.
17. U.S. Department of Health and Human Services. *Mental Health, United States, 2008*, Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services; 2010.
18. National Institute of Mental Health. No health without mental health. Available at: <http://www.nimh.nih.gov/about/director/2011/no-health-without-mental-health.shtml>. Accessed Jan. 29, 2013.

Successful Nutrition and Health Promotion for Adults with IDD Living in the Community

By Kathy Humphries, PhD



Individuals with disabilities, including intellectual and developmental disabilities (IDD), are currently one of the largest underserved groups of Americans with health disparities (1). It is documented that those with IDD are 2.2 times more likely to have health problems compared to the general population. Those with more severe IDD have even greater risk (2).

People with IDD operate with a “thinner margin of health” (3), meaning that a particular health condition will affect them more in terms of function, independence, and subsequent consequences. This is shown in their more frequent use of health care, unhealthier lifestyle behaviors, and lower access to health promotion programs and counseling (1).

Dietary intake in community-dwelling adults with intellectual or developmental disabilities is inadequate, with diets high in fat and empty calories and deficient in fruits and vegetables, whole grains, and dairy products (4-7). Such poor diets lead to the nutrition-related concerns that are disproportionately prevalent in this population, like weight problems (over- or underweight), bowel and gastrointestinal dysfunction, diabetes, nutrient deficits, cardiovascular disease, and osteoporosis (8-10,11-21). They are among the most prevalent and limiting secondary health conditions of adults with IDD who reside in community-based living arrangements. Furthermore, obesity rates for those with IDD have steadily increased over the past decades (22).

Previous research has shown that people with disabilities have nutrition-related secondary conditions that may improve with appropriate nutrition intervention (23). As we know however, the behavioral health piece of nutrition is most critical for any success in improving and maintaining healthy diets in this population. Developing healthful eating patterns these days is a challenge for almost all adults in the United States. In addition to any personal barriers that

are present for other adults, people with IDD must also contend with social barriers to a proper diet due to their reliance on social supports, restrictive environments and less direct control over their surroundings.

In the past 40 years, there has been a major and positive shift in living arrangements in the United States for individuals with IDD. Previously warehoused in large institutions, now adults with IDD can live successfully in the community with the proper skills and external supports as necessary (24).

The reality of the shift to this relatively new residential arrangement in terms of health and nutrition has been difficult. Few nutrition or physical activity health promotion programs have been successful, even short term, in this population (25). While compared with individuals in institutions, those in community settings are more involved in planning meals, buying food, and determining when and how their food is prepared (26), the structure of residential facilities overall fosters both poor nutrition and physical inactivity (25).

In community residential homes food budgets are strict and minimal and a major obstacle to providing adequate nutritional intake (26). Indications are that group homes provide insufficient amounts of all basic food groups, making an adequate diet impossible for all members of the household (26). Adults with IDD living in smaller, less supervised settings (group homes/family homes) have significantly higher rates of overweight and obesity – up to 80% of adults with mild to moderate IDD (27) compared to those living in highly controlled settings, such as institutions (28). Individuals with mild to moderate ID living in the less restricted community settings tend to have higher cardiovascular disease risk profiles (29).

Successful community living depends on maintaining one’s health. For example, evidence shows the weight gain that commonly occurs when individuals with IDD move into more independent settings brings with

it secondary conditions such as diabetes and associated limitations that can force an individual into a more restrictive living arrangement when the less restrictive setting does not work out (30,31).

As nutrition professionals, our task is clear; find effective ways to educate, counsel, plan, and support health-promoting eating patterns. Easier said than done!

In community-based supported living settings, the lifestyles of those with IDD are often influenced by support persons, such as families or direct support professionals (DSP) (25,32). While DSPs in the homes are responsible for producing meals, their lack of food preparation skills and nutrition knowledge (26,33), and inadequate support (34) complicate group home food systems. Typically, group home managers and DSPs receive little or no training in menu planning, nutrition, or creating health-promoting food environments (32,34,36). Low wages and high staff turnover further exacerbate the problem (37-39).

The attitudes of support persons strongly influence health behaviors. Positive, healthy role models are critical in order to promote healthy habits (28). And yet “negative supports” are the norm among many staff, families, teachers, coaches, and other role models. These take the form of poor role modeling (e.g. staff eating McDonalds during home meals), using food as reinforcement, downplaying the importance of healthy eating for the individuals they support, and actively discouraging or preventing participation in health promoting activities (32). Finally, caregiver resistance to changing routines to include proper nutrition is a significant barrier to dietary improvement (32).

Since those with IDD share decision-making with caregivers, motivating the caregivers to be involved is an important aspect of creating and maintaining healthful diets for those with IDD (40).

Successful Nutrition...

continued from page 9

Indeed, research shows that health behavior change is only successful in this population when nutrition education and behavioral techniques are combined with involvement of care providers (40)

The Director of the Centers for Disease Control, Dr. Thomas Frieden has argued that public health interventions that change the *context* for individual behavior are “the most effective public health action,” for everyone, including adults with IDD (41). Health promotion programs have shown that with proper health education, those with ID can learn the benefits of a healthy diet (42,43), but education on good diet is never enough to affect change. Adults with IDD need services that consider their support needs, residential situations, and developmental levels of understanding (40,44). Most important are programs that engage care providers and create a food environment that promotes access to healthful foods and, therefore, healthier diets (40,45).

MENU-AIDDS

Researchers at the University of Montana Rural Institute on Disabilities used a multilevel, ecological approach to nutritional health promotion in creating the MENU-AIDDS (Materials supporting Education and Nutrition for Adults with Intellectual or Developmental Disabilities) program. The program addresses individual nutrition education, interpersonal supports, home policies, and extended living/working environments to synergistically support healthy eating. Our goal was to increase health promoting behaviors by focusing on environmental change within community based residential settings, addressing high staff turnover rates, integrating policies for nutrition and foods training, and incor-

porating healthy choices within the routine schedule of activities.

Figure 1 is a visual depiction of the group home food systems’ elements that influence health outcomes for adults with IDD in these supported living arrangements. The organization of food system procedures, using MENU-AIDDS, impacts the quality of menu planning. Implementation of the menus directly affects participants’ dietary intake, which in turn results in the condition of one’s health, including one’s body weight and gastrointestinal function.

MENU-AIDDS is based upon the priorities of the health and nutrition fields and of the disability community, and it honors the principles of independent living. MENU-AIDDS’ dietary recommendations are based on the Dietary Guidelines for Americans and MyPlate. It is not a therapeutic diet, though positive physiological outcomes have occurred due to normalizing the diets and bringing them in line with the Dietary Guidelines. MENU-AIDDS targets foods and food groups for improvement, including increased fruits and vegetables, use of low-fat dairy products, less processed meats and more vegetable sources of protein (e.g. beans and legumes), and more whole grains.

MENU-AIDDS trains managers to build a food system that will hold steady with the constantly changing staffing. The one-day, in person training for group home managers and service provider trainers and health directors included nutrition education and activities targeting awareness, knowledge and tools, self-efficacy, skill building, and motivation.

We evaluated whether implementation of MENU-AIDDS would result in improved dietary intake for the adult residents with IDD and if physiological outcomes, including overweight/obesity and gastrointestinal function improved. One hundred and eleven group home managers, senior staff, and nutrition professionals received MENU-

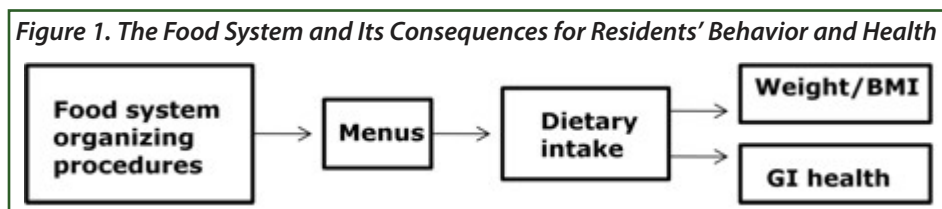
AIDDS training in Montana. Trainees then implemented MENU-AIDDS to the extent the components fit the needs of their group homes. Thirty-three group homes provided complete sets of baseline evaluations, and 12 of these (36.4%) returned the 6-month, follow-up evaluations. The pre and post evaluations assessed the group homes’ dietary offerings and dietary intake using the food frequency questionnaire, residents’ body weights from administrative records, gastrointestinal health by way of survey, and measured the extent of the homes’ use of the MENU-AIDDS materials across the six months.

Statistically significant improvements in dietary intake were seen in dairy, fruits, vegetables, beans/peas, processed meats, and the fiber and healthful proteins variables. The more use that the homes made of the MENU-AIDDS materials, the better was their household dietary improvement scores.

Users of MENU-AIDDS who were overweight or obese lost a healthy but significant amount of weight and improved their scores on “functional limitations due to body weight.” Again, the more use that the homes made of MENU-AIDDS, hence the more dietary improvements, the better the weights improved. Bear in mind however that MENU-AIDDS is not a weight-loss diet. The improved weight status came solely as a result of following more closely the Dietary Guidelines for Americans.

Reports of residents’ gastrointestinal health and functioning showed improvements over all homes as well. The homes were split into two groups for an analysis of GI change according to whether the home made more (top 50%) or less (bottom 50%) dietary improvements. Significant differences between those groups were found for diarrhea, hemorrhoids, lengthy bowel program, GI pain, and an overall, composite GI health variable. Reports of normal GI functioning increased significantly more at six months in the group that made more dietary improvements. All these results are under peer review currently and citations for the published articles are forthcoming in a future issue of *BHN Newsletter*.

MENU-AIDDS is currently utilized in four states in about 160 homes, serving



Successful Nutrition...

continued from page 10

the needs of over 950 group home residents. Because the program requires a trainer to travel to the site to deliver the 7-8 hour training session, the reach of MENU-AIDDs is limited in its present consulting model format. This model is most cost effective and works perfectly well for a larger residential services provider or a group of providers cooperating to bring in a trainer. MENU-AIDDs in the consulting format has been found to be out of reach for smaller providers or individual group homes who want to implement it.

Consequently, a low-cost, online version of MENU-AIDDs is under development that will have staff, manager, family, and resident training on very practical nutrition and foods planning. It will also include online dietary management tools to be used every day that apply directly to the needs of this population by integrating special dietary needs, food preferences, MNT prescriptions, and other information specific to the individual or home.

About the Author

Dr. Kathy Humphries, PhD is a Project Director for the Research and Training Center on Disability in Rural Communities at The University of Montana Rural Institute (UCED) and the Nutrition Program Director for the Montana Disability and Health Program. She can be contacted at atkhumphries@ruralinstitute.unt.edu.

The author wishes to thank Alicia Dixon of Oregon State University for additional background for this article.

References

1. Drum, C., Krahn, G. L., Peterson, et al. Health of people with disabilities: Determinants and disparities. In C. Drum, G. L. Krahn & H. Bersani Jr (Eds.), *Disab and Pub Health*. White Plains, MD: American Public Health Association Press, 2009.
2. Temple, V. A. . Objectively measured physical activity of people with intellectual disability: participation and contextual influences. *Phys Ther Rev*.2010;15(3):183-196.
3. Pitetti, K. H., & Campbell, K. D. (1991). Mentally retarded individuals-a population at risk? *Med & Sci in Sports & Exer*, 23(5), 586.
4. U.S. Department of Health and Human Services. Closing the Gap: A National Blueprint to Improve the Health of Persons With Mental Retardation. Rockville, MD: Public Health Service, Office of the Surgeon General; 2002.
5. Lindeman AK. Resident managers' nutrition concerns for staff and residents of group homes for mentally retarded adults. *J Am Diet Assoc*. 1991;91:602-604.
6. Mercer KC, Ekvall SW. Comparing the diets of adults with mental retardation who live in intermediate care facilities and in group homes. *J Am Diet Assoc*. 1992;92:356-358.
7. Seekins T, Traci M, Bainbridge D, et al. Secondary conditions risk appraisal for adults. In: Nehring W, ed. *Health Promotion for Persons With Intellectual And Developmental Disabilities: The State of Scientific Evidence*. Washington, DC: American Association on Mental Retardation; 2005:325-342.
8. Traci M, Seekins T, Szalda-Petree A, et al. Assessing secondary conditions among adults with developmental disabilities: a preliminary study. *Ment Retar*. 2002;40:119-131.
9. U.S. Department of Health and Human Services. Closing the Gap: A National Blueprint to Improve the Health of Persons With Mental Retardation. Rockville, MD: Public Health Service, Office of the Surgeon General; 2002.
10. Lindeman AK. Resident managers' nutrition concerns for staff and residents of group homes for mentally retarded adults. *J Am Diet Assoc*. 1991;91:602-604.
11. Draheim CC, Stanish HI, Williams DP, et al. Dietary intake of adults with mental retardation who reside in community settings. *Am J Ment Retar*. 2007;112:392-400.
12. McGuire BE, Daly P, Smyth F. Lifestyle and health behaviours of adults with an intellectual disability. *J Intel Disab Res*. 2007;51:497-510.
13. van Staveren WA, de Groot LCPGM, Blauw YH, et al. Assessing diets of elderly people: problems and approaches. *Am J Clin Nutr*. 1994;59:221S-223S.
14. Braunschweig C, Gomez S, Sheean P, et al. Nutritional status and risk factors for chronic disease in urban-dwelling adults with Down syndrome. *Am J Ment Ret*. 2004;109:186-193.
15. Humphries K, Traci M, Seekins T. Food on Film: pilot test of an innovative method for recording food intake of adults with intellectual disabilities living in the community. *J Appl Res Intel Disab*. 2008;21:168-173.
16. Kumanyika S, Tell G, Shemanski L, et al. Dietary assessment using a picture-sort approach. *Am J Clin Nutr*. 1997;65:1123S-1129S.
17. Smith A. Cognitive psychological issues of relevance to the validity of dietary reports. *Eur J Clin Nutr*. 1993;47:S6-S18.
18. Coucouvanis K, Prouty R, Lakin C. Services provided by state and nonstate agencies in 2006. In: Prouty RW, Smith G, Lakin KC, eds. *Residential Services for Persons With Developmental Disabilities: Status and Trends through 2006*. Minneapolis: University of Minnesota, Research and Training Center on Community Living, Institute on Community Integration; 2007:38-39.
19. Gabre P, Martinsson T, Gahnberg L. Move of adults with intellectual disability from institutions to community-based living: changes of food arrangements and oral health. *Swed Dent J*. 2002;26:81-88.
20. Rimmer JH, Braddock D, Fujiura G. Prevalence of obesity in adults with mental retardation: implications for health promotion and disease prevention. *Ment Ret*. 1993;31:105-110.
21. Haveman M, Heller T, Lee L, et al. Major Health Risks in Aging Persons With Intellectual Disabilities: An Overview of Recent Studies. *J of Pol and Prac in Intel Disab*. 2010; 7(1): 59-69. doi: 10.1111/j.1741-1130.2010.00248.x
22. Yamaki, K. Body weight status among adults with intellectual disability in the community. *J Infor*. 2005;43(1).
23. Frey B, Rimmer J. Comparison of body composition between German and American adults with mental retardation. *Med Sci Sports Exer*. 1995;27:1439-1443.
24. Olmstead v. L. C. (98-536) 527 U.S. 581 (1999).
25. Krahn G, Hammond L, Turner A. A cascade of disparities: Health and health care access for people with intellectual disabilities. *Ment Ret and Dev Disab Res Rev*. 2006;12(1):70-82. doi: 10.1002/mrdd.20098.
26. Humphries K, Traci M, Seekins T. A preliminary assessment of the nutrition and food-system environment of adults with intellectual disabilities living in supported arrangements in the community. *Ecol Food Nutr*. 2004;43:517-532.
27. Stanish H, Draheim C. Walking habits of adults with mental retardation. *Ment Retar*. 2005b;43(6): 421-427.
28. Rimmer J, Yamaki K. Obesity and intellectual disability. *Ment Retar and Dev Disab*. 2006; 12(1):22-27.
29. Draheim C. Cardiovascular disease prevalence and risk factors of persons with mental retardation. *Ment Rear and Dev Disab*. 2006; 12(1):3-12.
30. Seekins T, Traci M, Bainbridge D, Humphries K. Secondary conditions risk appraisal for adults. In W. Nehring (Ed.). *Health promotion for persons with intellectual and developmental disabilities: The state of scientific evidence* (pp. 325- 342). Washington, DC: American Association on Mental Retardation, 2005.
31. Springer N. From institution to foster care: Impact on nutritional status. *Am J Ment Def*. 1987;91:321-327.
32. Rimmer J, Rowland, J. Health promotion for people with disabilities: Implications for empowering the person and promoting disability-friendly environments. *Am J of Lifestyle Med*. 2008;2(5):409-420.
33. Rimmer J, Braddock D, Marks B. Health characteristics and behaviors of adults with mental retardation residing in three living arrangements. *J Intellect Disabil Res*. 1995;16:489-499.
34. Humphries K, Traci M, Seekins T, et al. Nutrition and Disability. Rural Disability and Rehabilitation Research Progress Report No.
35. Missoula: The University of Montana Rural Institute; 2002.
36. Lunsy Y, Straike A, & Armstrong S. Women be healthy: Evaluation of a women's health curriculum for women with intellectual disabilities. *J of App Res in Intel Diabs*. 2003;16(4): 247-253.
37. Larson S, Lakin K. Direct-care staff stability in a national sample of small group homes. *Ment Retar*. 1992;30:12-22.
38. Felce D, Lowe K, Beswick J. Staff turnover in ordinary housing services for people with severe or profound mental handicaps. *J Int Disab Res*. 1993;37:143-152.
39. Bainbridge D, Seninger S. Montana Providers of Services to Adults With Developmental Disabilities: Urban/Rural Characteristics, and Direct Service Staff Turnover Rates and Replacement Costs. Rural Disability and Rehabilitation Research Progress Report No. 25. Missoula: The University of Montana Rural Institute; 2004.
40. Hamilton S, Hankey C, Miller S, et al.. A review of weight loss interventions for adults with intellectual disabilities. *Obesity Reviews*. 2007;8(4), 339-345.
41. Friedan, T. A Framework for Public Health Action: The Health Impact Pyramid. *Am J Pub H*. 2010;100(4):590-595.
42. Heller T, Hsieh K, & Rimmer J H. Attitudinal and psychosocial outcomes of a fitness and health education program on adults with down syndrome. *Am J Ment Retar*. 2004;109(2), 175-185.
43. Mann J, Zhou H, McDermott S, & Poston M. Healthy behavior change of adults with mental retardation: Attendance in a health promotion program. *J Infor*. 2006;111(1).
44. Bodde A, & Seo D. A review of social and environmental barriers to physical activity for adults with intellectual disabilities. *Disab and Health J*. 2009; 2(2),57-66. doi: DOI: 10.1016/j.dhjo.2008.11.004
45. Humphries K, Traci M, Seekins T. Nutrition education and support program for community dwelling adults with intellectual disabilities. *Int Dev Disab*. 2008;46:335-345.

Registered Dietitians' Service to Group Homes for Adults with Developmental Disabilities

Kathy Humphries, PhD; Lester Rosenzweig MS, RD, CDN; Paula Cushing, RD, LDN; and Ruth Licitra, MPH

Submitted by Lester Rosenzweig, MS, RD, CDN from *The Open Nutrition Journal*, 2012, 6, 116-122 at

<http://www.benthamscience.com/open/tonutrij/openaccess2.htm>. Accessed February 4, 2013.

Abstract

An online survey of registered dietitians was conducted to characterize their professional activities for providers of residential services for adults with intellectual or developmental disabilities (IDD) in the United States. The goal of the survey was to characterize the nutrition services delivered in community based group homes and the registered dietitians performing them. Forty nine RDs responded fully to the survey, indicating significant hours spent providing consultation on food service, clinical dietetics, staff training, dietary monitoring and administrative nutrition services. The most common services are conducting nutritional assessments of residents and providing direct service in the form of menus for the homes and/or clinical evaluation and compliance monitoring of therapeutic diets. Through this survey we discovered that there is a wide variety of arrangements, services, and hours spent in nutrition services delivery in group homes. This survey also indicates a strong need for additional training for the nation's dietitians to serve this nutritionally vulnerable population.

Professional services from registered dietitians (RDs) are not required by most states for licensure of IDD group homes. Further, RD services are typically not covered by Medicaid, the funding used to support the majority of the residences. So, although many of the nutrition-related secondary conditions may be prevented or managed effectively with nutrition guidance, many residential service providers may not use or may under-use professional nutrition services. Nutrition services might then be considered optional for this population in these settings. When a provider therefore makes a commitment to providing nutrition services in their group homes, the nature of the effective services and the range of service options are particular to that provider.

RDs primarily are hired as private consultants to perform a range of

services that they and the providers agree is beneficial to the residents and cost effective for the agency.

Methodology

The universe of potential nutrition services activities was determined through 1) preliminary sampling of RDs to establish the categories of services and specific tasks within the survey, 2) exhaustive lists of all the services the three authors have provided in their home states (Montana, New York, and Tennessee) and, 3) by searching the archives of the Behavioral Health Nutrition Dietetic Practice Group (BHN) of the Academy of Nutrition and Dietetics' (the Academy) EML for entries indicating any nutrition services that EML members provide.

Registered dietitians were sought to complete the survey who identified themselves as professionals who provide dietetics services in this setting. The respondents were members of the BHN or who were known to BHN members as working professionals in this specialty.

The questions about services were asked in the following format: "Do you provide the following (food service/clinical/training/monitoring/administrative) services?" From that question we obtained data on numbers and percentages of RDs who provided the 26 services at all in group homes.

The survey was formatted onto SurveyGizmo and made available to the BHN membership. Recruitment occurred on the BHN EML and through requests to the membership to invite other RDs in the field of IDD nutrition to take the survey. The survey was active for seven weeks in the fall, 2010.

Results

Respondents

Forty-nine registered dietitians responded to the online survey. The average number of years respondents had been working as a dietetics

professional with adults with IDD was 11.3 years (1-5 years=16%; 6-10 years=20%; 11-15 years=10%; >15 years=53%). Fifty-three percent of the respondents reported having received no additional training in this specialty or with adults with IDD beyond the standard dietetics curriculum.

Respondents reported receiving help and information in the field of nutrition and disability from the Dietetic Practice Groups of the Academy of Nutrition and Dietetics (50%), individuals such as their supervisor or other registered dietitians (31%). They look to their professional organizations primarily for professional resources (65%), but also to internet searches (28%) and journals or toolkits (8%). Continuing education is required to maintain active RD status and the respondents found information regarding continuing education units in this field through their professional organizations (48%), webinars and workshops (19%), newsletters and journals (19%), and other (14%).

The residential services providers on whom the respondents were reporting operated a mean of 27 group homes (median = 12 homes). The homes were located in 19 states. Forty seven percent were located in urban or mostly urban areas, 14% in rural or mostly rural areas, and 39% in mixed areas. That is, some of the provider's homes were in rural and some in urban areas.

Services Data

Among the top five activities that are represented in the services that RDs provide for group homes were: recommending food products to meet special dietary needs (95.9% of RDs provide this service), developing individualized meal plans for consumers (91.7%), creating menus considering special dietary needs (89.6%), recommending diet orders (93.9%), conducting assessments and ongoing evaluation with consumers (91.8%).

The smallest percentage of respondents reported providing these services:

continued on page 13

Register Dietitians' Service...

continued from page 12

scheduling appointments and meetings (31.9% of RDs provide this service), billing (32.6%), reporting (34.8%), conducting new staff orientation (43.8%), and reviewing day program menus and/or meals (44.9%),

Discussion and Conclusion

This was a preliminary survey to characterize the nutrition services delivered in community based group homes and the registered dietitians performing them. It is the first survey of its kind to examine the activities related to nutrition offered by nutrition professionals to this vulnerable population. The survey and its results set the stage for additional research into how the services provided affect the food systems in the homes and the residents' dietary intake and their health.

When a residential services provider commits to utilizing nutrition services, what services are delivered? The answer appears to be that the RD is hired to conduct nutritional assessments of residents and to provide direct service in the form of menus for the homes and/or clinical evaluation

and compliance monitoring of therapeutic diets.

It should be noted that this survey was sent to the BHN and the results reflect the use of the Academy's professional resources for information, help, and continuing education. This limited the sample and probably underrepresents RDs who have a small practice with this population or who do not identify themselves strongly with this part of their practice.

The hours associated with the tasks and services that these RDs provided to group homes should not be understood to represent the activities of all RDs. Many group homes (it is not clear how many due to lack of research) do not have dietetic services available at all. Therefore it is not appropriate to conclude that the average hours that these RDs devoted to the activities in this study are typical across all U.S. group homes.

Eleven states require the use of registered dietitians and an additional five states require a nutrition professional to supervise the food service or particular aspects of it. Therefore, while hiring a dietitian to assess the dietary needs of residents or provide food or clinical

services may be best practice among the nutrition profession, it is not expected for group home licensure for the majority of states.

This survey indicates a strong need for additional training for the nation's nutrition services providers who wish to assess, counsel, educate and prescribe diets to independent adults with disabilities.

About the Authors

Kathy Humphries, PhD is a Project Director for the Research and Training Center on Disability in Rural Communities at The University of Montana Rural Institute (UCED) and the Nutrition Program Director for the Montana Disability and Health Program. atkhumphries@ruralinstitute.unt.edu

Lester Rosenzweig MS, RD, CDN is Senior Dietitian for the Schenectady ARC in Schenectady, NY.

Paula Cushing, RD, LDN is a Regional Dietitian for the Tennessee Department of Intellectual and Developmental Disabilities in Nashville.

Ruth Licitra, MPH is a researcher at the University of Montana Rural Institute: Montana Disability and Health Program.

SAVE THE DATE!

The International Conference on Nutrition and the Brain – July 19-20, 2013 - Washington, D.C.

The International Conference on Nutrition and the Brain will feature some of the world's foremost experts sharing their latest insights on the role of nutrients and lifestyle in Alzheimer's disease, multiple sclerosis, Parkinson's disease, and other conditions.

Early Bird Registration by **April 15** – For the full agenda and speaker information, visit: www.NutritionandtheBrain.org.

Nutrition & Health: State of the Science and Clinical Applications – May 13-15, 2013 - Seattle, WA

BHN is invited to a celebration of 10 years of the Arizona Center for Integrative Medicine's flagship conference exploring the links between nutrition, disease, and health. This year's conference—**May 13-15 in Seattle, Washington**—promises to be the most exciting, inspirational, and tasty yet. *Nutrition & Health: State of the Science and Clinical Applications* is the premier nutrition conference for health professionals in the U.S. Presented by Arizona Center for Integrative Medicine at the University of Arizona College of Medicine, the conference agenda assembles internationally-recognized researchers, clinicians, educators, and chefs, all of whose work focuses on the interface between nutrition and healthful living.

Academy of Nutrition and Dietetics Food & Nutrition Conference & Expo October 19-22, 2013 - Houston, TX

Keep these dates in mind:

March – April 2013: Check the FNCE web site (www.eatright.org/fnce) for educational session updates and tools

May 2013: Check your mail for the FNCE Program Preview booklet

June 15, 2013: Registration and Housing opens online at www.eatright.org/fnce/attendees

Sept. 6, 2013: Early Discounted Registration ends.

Communication, Collaboration and Documentation: Teamwork to Improve Outcomes when Working with Clients with Eating Disorders

By Melanie Jacob, RD, CSSD and Karen Wetherall, MS, RD, LDN

Counseling clients with eating disorders (EDs) requires unique professional skills. In addition to strong counseling skills, RDs need to be excellent communicators. Furthermore, documentation and timely communication with the treatment team sets the stage for better patient care and treatment outcomes. Though communicating with team members may seem like one more task, collaboration will yield a better return, and our patients deserve the best quality care we can provide them.

Documentation is the foundation for data collection. RDs need to document outcomes and utilize tools to report the impact they have on nutrition restoration and ED recovery. They need to use standardized assessment guidelines and terminology to report progress. Documentation is critical information for treatment team members and it can show insurance companies that nutritional counseling is valuable and productive, supporting the approval of more visits. Electronic medical records (EMR) can save time and allow for data to be collected and evaluated. Cumulative outcome data can provide powerful validation for the benefits of nutrition counseling. Currently there is one EMR (KaiZenRD EMR) that allows for data to be collected, and the author is in the process of establishing assessment and documentation standards.

RDs treating clients with EDs should have a policy that states that they require a full treatment team. What constitutes a full treatment team in an outpatient setting? This may depend on the nature and severity of the ED. At a minimum, it would require that the client see a therapist regularly. For clients who are medically compromised, having a physician on board is critical. With the psychological issues (i.e. anxiety and depression) many clients with EDs face, it's also common for them to see a psychiatrist for psychotropic medication management. Additional treatment team members may include family members, family

therapists and movement specialists (i.e. personal trainers or yoga instructors). Effective treatment requires collaboration and communication with the full treatment team. Remember when communicating electronically that HIPAA approved communication should be by encrypted e-mail. Avoid the use of full names when communicating with e-mail; use initials of client if sending information over e-mail.

What portions of the assessment can be beneficial to the medical and therapy team? What data is essential to document outcomes? We need to work together to answer these questions as a profession. Suggestions for documentation include:

- Provide a short overview of the course and length of the ED problem
- Include subjective information such as current symptoms
- Include a food history of likes, dislikes or unsafe foods; identify a "good" day of eating and "challenging" day, if appropriate
- Include objective data that is important for other treatment team members to know
- Include anthropometrics: height, weight, BMI, significant weight changes, and calculation of percent weight loss, if indicated
- Provide an estimation or projection of normal weight range

Assessing the data requires decision-making--it includes your impression. Some of the items to include in assessment documentation are:

- Nutritional adequacy
- Diagnostic and PES statements
- Impression about motivation
- Impression about medical concerns such as low BMI and appropriateness of exercise
- Impression about ED behaviors such as episodes of restricting, purging and binge eating



Melanie Jacob, RD, CSSD



Karen Wetherall, MS, RD, LDN

- Impression of appropriateness for treatment approach and level of care

Using two examples, we'll explore the RDs role in coordination of care and documentation.

For standardized documentation terminology please consult the Academy of Nutrition and Dietetics' Pocket Guide for International Dietetics & Nutrition Terminology (IDNT) Reference Manual, Standardized Language for the Nutrition Care Process, Fourth Edition, 2013.

Situation #1: (see chart on page 15)

Time sensitive medical concerns need to be addressed. The RD identifies a client at risk for re-feeding syndrome or bradycardia and determines the need for medical evaluation sooner rather than later.

Solution: The RD contacts the physician asking him/her to monitor specific blood work (for re-feeding syndrome) or take vital signs and evaluate orthostasis and bradycardia by EKG.

Situation #2: (see chart on page 15)

Clients who have EDs are at risk of using "splitting". Splitting occurs when the patient desires to protect the illness by pitting treatment team members against each other.

Solution: Clients need to hear a consistent message. This requires that the treatment team members are aligned with the treatment plan and that it's communicated consistently with specific recommendations and approach to care.

Final Thoughts:

In addition to quality client care, benefits of collaborating include: building essential relationships with treatment team providers, establishing yourself as an expert in your community, improving opportunities for insurance reimbursement, and creating data for opportunities for collection and evaluation for

Communication, Collaboration...

continued from page 14

outcomes research. No matter what stage of readiness you find yourself in as it relates to documentation and use of the IDNT or EMR the opportunity to improve your documentation skills is vital and will bring returns to our clients and our profession.

About the Authors:

Melanie Jacob, RD, CSSD, owns Nutrition Therapy, LLC in Troy, Michigan. Her practice focus is counseling clients recovering from eating disorders. She is a co-author of the Academy of Nutrition and Dietetics practice paper: Nutrition Intervention in the Treatment of Eating Disorders.

Karen Wetherall, MS, RD, LDN is the Dietetic Internship Director at the University of Tennessee in Knoxville. She has a private practice working with clients with eating disorders and consults at Moonpointe: A Focus Treatment Center Intensive Outpatient Program for Eating Disorders. Karen is the Eating Disorders Resource Professional and Publications Chair for BHN.

Situation 1

Presentation	13 year old with both parents in session
Diagnosis	Protein Calorie Malnutrition, Anxiety
Nutrition Diagnosis/Problem	NI-1.2 Inadequate energy intake
Etiology/Related to	Compulsive exercise; healthy, careful eating
Signs & Symptoms/As Evidenced by	16% weight loss in 9 months; 80% IBW
Impression	Appropriate for family based (Maudsley) treatment (FBT)
Intervention	ND-1.3 Schedule of foods: Plan 3 meals & 3 snacks ND-1.2 Composition of meals/energy modified: Plan meals with caloric density. E-1.4 Nutrition relationship to health: Provide parent education on increased caloric needs for weight restoration of 1-2 pounds/week. E-1.5 Recommended modifications: Discontinue all physical activity until medically cleared. RC-1.4 Collaboration with other providers: Collaborate and consult with MD; recommend medical evaluation to monitor vitals, labs RC-1.5 Referral to other providers: Refer to therapist who utilizes FBT approach.

Situation 2

Presentation	Adult with chronic dieting
Diagnosis	Binge Eating Disorder
Nutrition Diagnosis/Problem	NI-1.3 Excessive energy intake
Etiology/Related to	Irrational beliefs about the effects of food on the body; desire for weight loss
Signs & Symptoms/As Evidenced by	Weight gain, intake of energy dense foods, large portions of food and BMI of 30.
Impression	Recommend that primary focus of normalized eating take priority over weight loss goals.
Intervention	ND-1.3 Schedule of foods: Normalize meal pattern. C-1.1 Cognitive-Behavioral Theory: Explore irrational beliefs & identify antecedents to behaviors that contribute to eating issues. C-2.2: Goal setting: Client agrees to work on meals spacing to prevent overeating C-2.3: Self-monitoring: Client agrees to record food & feelings including hunger/fullness levels

In the BHN Pipeline!

ADHD & Down Syndrome:

According to the National Down Syndrome Society (NDSS), ADHD-like symptoms are more common in young children with Down syndrome (DS) compared to children from the general population. Compounding symptoms such as stereotypy (repetitiveness), anxiety or extreme irritability in the presence of ADHD-like symptoms may indicate another disorder such as autism, bipolar disorder or obsessive compulsive disorder. In children with Down syndrome who have difficulty paying attention, ADHD is a diagnosis of exclusion. Other problems must be ruled out first including hearing and visual problems, celiac disease, significant constipation, thyroid disease and sleep apnea. The NDSS has

defined the standards of quality care for DS through [Health Care Guidelines](#). In addition to specific recommendations for screening tests, information is included about the kinds of medical conditions that individuals with Down syndrome are at risk for and suggestions for early intervention, diet and exercise, and other issues across the lifespan.

<http://www.ndss.org/Resources/Health-Care/Associated-Conditions/ADHD-Down-Syndrome/> Accessed November 27, 2012.

In the BHN Pipeline features current practice resources, book reviews and member products of interest to our members. If you have a resource or product to feature, contact newsletter@bhndpg.org.

Student Corner:

Exercise Compulsion and Eating Disorders: Too Much of a Good Thing

By Sara R. Wilburn, BSDN

"What began the pursuit of pleasure had become the avoidance of pain."

Introduction

According to Bewell-Weiss and Carter, "exercise compulsion is characterized by a significant amount of physical activity combined with a compulsive need to do the activity" (1). Exercise addiction can be distinguished from compulsions and impulse control disorders both of which, like an addiction, involve excessive behavior that creates adverse effects (2). While gambling and internet addictions will be the only designated behavioral addictions in the upcoming DSM-5 (3), there is still more research needed to validate a separate diagnostic category for exercise compulsion (4).

What happens when we get too much of a good thing? In today's society we are often trained to believe that more is better. The more we workout, the more fit we become. However, what happens when a healthy habit turns into a serious health concern? Several messages about exercise are focused on cultural praise. America's "obesity epidemic", living a healthy lifestyle, using exercise as a tool for managing stress and depression all support such praise (4). Although there is truth in these messages, exercise could mean something different to someone suffering from an eating disorder, despite the healthy benefits provided.

The Addictive Nature of Exercise

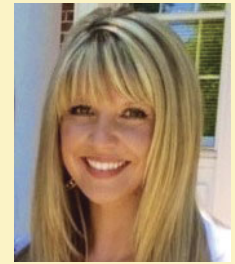
Research indicates a parallel in brain activity with individuals who engage in compulsive exercise and those who abuse substances, supporting the addictive impact of exercise. The hedonic homeostatic dysregulation causes neuroadaptive changes with repeated use, resulting in decompensated reward

circuitry in the brain (5). Similar to exercise restriction, symptoms of dysphoria, irritability, anxiety, and withdrawal appear when substance use is absent. Parallel with the eating disorder client, brain chemicals—serotonin and dopamine play a role in dysregulation and poor reuptake, causing the same mood instability (4).

Boecker, et al. studied the impact of brain chemicals of a runner, using PET scans to measure mood before and after a two hour run (6). Results present elevated endorphins attached to the prefrontal areas of the brain, greater euphoria and lower pain receptors, which create a sense of "numbness and feel good" mood in the runner. Both exercise and substance abuse increase dopamine release, eliminating anxious feelings or depression. In addition, continued use of substance or exercise alters sense of reward, creating an increase in use, frequency, and intensity. Feelings of distress appear, related to symptoms of withdrawal (6).

Eating Disorders and Exercise Compulsion

Literature presents mixed results in determining whether there's a higher prevalence of compulsive exercise with Anorexia Nervosa (AN) purging subtype compared to AN restricting (7). Recent research has identified the following predictors associated with exercise compulsion and eating disorders: Higher levels of dietary restraint, depression and self-esteem; lower levels of Obsessive Compulsive Disorder (OCD) symptoms and restricting subtype (1). Other research revealed more physical problems; elevated scores on the EDI (Drive for Thinness and Body Dissatisfaction); increased nutritional challenges, poor clinical outcome, longer hospitalization; and higher rates of relapses (8).



When assessing the client's relationship with exercise, it is critical to get a clear understanding prior to the onset of the illness (4). Other factors to consider are: elevated perfectionism, anxiety, depression, and OCD traits; higher self-esteem, lower body self-esteem; lower reward dependence and novelty seeking (4).

Discussion

What do we know about exercise? Exercise is very measurable, concrete, and has a significant amount of cultural reinforcement. It is not surprising that individuals characterized with eating disorder temperaments such as rigid, harm avoidant, living in a black and white world, and people pleasers are more highly susceptible to compulsive exercise. Often, these clients have found the one thing they do well, can do privately, and is culturally reinforced (4).

Journaling, body movement awareness, and relaxation exercises are among several techniques professionals use as part of the treatment process. The following questions can be asked in trying to evaluate whether exercise levels have gone from reasonable to excessive: (9)

1. Do you feel guilty if you miss your workout?
2. Do you still exercise when you are sick or hurt?
3. Would you miss going out with friends or spending time with family, just to ensure you got your workout in?
4. Do you freak out if you miss a workout?
5. Do you calculate how much to exercise based on how much you eat?
6. Do you have trouble sitting still because you're not burning calories?

Student Corner

continued from page 16

7. If you're unable to exercise, do you feel compelled to cut back what you eat that day?

Although exercise compulsion is not included in the DSM-5 as a separate behavioral addiction, it is imperative that certain healthcare providers become familiar with its attributes (2). An experienced eating disorder physician, registered dietitian, therapist, and exercise physiologist should work together and educate the client, family, coaches, and educators to support optimal recovery (4). Furthermore, the client's support system must be an integral part of the treatment process,

being aware of the slippery slope of exercise compulsion, especially after an individual leaves a structured treatment environment (4).

About the Author

Sara R. Wilburn, BSDN is part of the BHN Student Committee and currently a dietetic intern and graduate student in food and nutrition services at the University of Mississippi.

References

1. Bewell-Weiss CV, Carter JC. Predictors of excessive exercise in anorexia nervosa. *Comprehensive Psychiatry*. 2010; 51:566-571.
2. Freimuth M, Moniz S, Kim SR. Clarifying exercise addiction: Differential diagnosis, co-occurring disorders, and phases of addiction. *Int J Environ Res Public Health*. 2011; 10: 4069-4081.
3. American Psychiatric Association. DSM 5 Development. 2010. <http://www.dsm5.org/pages/default.aspx>. Accessed on December 19, 2012

4. Exercise and eating disorders info: <http://www.eatingrecoverycenter.com/eating-disorder-treatment-professional-development-series/running-on-empty/>. Accessed on January 30, 2013.
5. Koob GF, LeMoal M. Drug abuse: Hedonic Homeostatic dysregulation. 1997; 278:52-57.
6. Boecker H, Sprenger T, Spilker ME, et. Al. The runner's high: Opioidergic mechanisms in the human brain. *Cerebral Cortex*. 2008; 18: 2523-2531.
7. Grave RD, Calugi S. Compulsive exercise to control shape or weight in eating disorders: prevalence, associated features, and treatment outcome. 2008;49; 346-352.
8. Hay PJ, Mond JM, Rodger B, et al. Relationship between exercise behavior, eating disorder behavior and quality of life in a community sample of women: when is exercise excessive? *European Eating Disorders Review*. 2004; 12: 265-272.
9. Exercise compulsion and its dangers info: www.remudaranch.com/ourprograms/bulimia-treatment/exercise-compulsion-and-its-dangers. Accessed on December 29, 2012.

In Search of Evidence

By Ruth Leyse-Wallace, PhD, RD

Mental Illness

Davison KM, Kaplan BJ. **Nutrient intakes are correlated with overall psychiatric functioning in adults with mood disorders.** *Can J Psychiatry*. 2012 Feb; 57(2):85-92.

<http://www.ncbi.nlm.nih.gov/pubmed/22340148>

In a cross-sectional study of ninety-seven community-based adults, significant correlations were found between scores on the Global Assessment of Functioning (GAF) and energy (kilocalories), carbohydrates, fibre, total fat, linoleic acid, ribo-flavin, niacin, folate, vitamin B6, vitamin B12, pantothenic acid, calcium, phosphorus, potassium, and iron (all P values < 0.05), as well as magnesium ($r = 0.41$, $P < 0.001$) and zinc ($r = 0.35$, $P < 0.001$).

Though modest in magnitude, the pattern of correlations was consistent, indicating higher levels of mental function associated with a higher intake of nutrients. Depression and mania scores, which were generally mild or moderate, did not individually show consistent patterns. When dietary supplement use was added to nutrient intakes from food, GAF scores

remained positively correlated ($P < 0.05$) with all dietary minerals.

Eating Disorders

1) Angermeyer MC, Holzinger A, Carta MG, and Schomerus G. **Biogenetic explanations and public acceptance of mental illness: systematic review of population studies.** *Br J Psychiatry*. 2011 Nov; 199(5):367-72. doi: 10.1192/bjp.bp.110.085563.

<http://www.ncbi.nlm.nih.gov/pubmed/22045945>

2) Angermeyer MC, Mnich E, Daubmann A, et al. **Biogenetic explanations and public acceptance of people with eating disorders.** *Soc Psychiatry Psychiatr Epidemiol*. 2013, Jan 8.

<http://www.ncbi.nlm.nih.gov/pubmed/23296547>

Thirty-three studies were reviewed which investigated whether biogenetic causes/explanations for mental illness resulted in more tolerance and less stigma. Generally, biogenetic causal attributions were not associated with more tolerant attitudes; they were related to stronger rejection in most studies examining schizophrenia. The stereotype of self-responsibility was

unrelated to rejection in most studies. Public images of mental disorder are generally dominated by the stereotypes of unpredictability and dangerousness. Use of these models for explanations may increase willingness to seek help (seek a medical solution for a medical problem), but may also decrease expectations for recovery. (Ref. 1)

Another study examined whether biogenetic attribution is positively associated with acceptance of people suffering from eating disorders. Respondents were presented with a vignette depicting a young female suffering from either anorexia nervosa ($N = 680$) or bulimia nervosa ($N = 667$), followed by a fully structured interview including questions on causal attributions, emotional reactions and desire for social distance.

Attribution to hereditary factors showed hardly any relationship with attitudes toward people with symptoms of eating disorders. Respondents who endorsed brain disease as a cause tended more to hold those afflicted



In Search of Evidence...

continued from page 17

responsible for their condition. They also expressed more negative emotions and a stronger preference for social distance. Biogenetic causal models of eating disorders do not decrease the stigma surrounding these illnesses; it may even entail the risk of increasing it. (Ref. 2)

Biogenetic causal models appear to be an inappropriate means of reducing rejection of people with mental illness.

Addictions

Stetka, B and Levy S. **A Creative Approach to Managing Substance Abuse.**

<http://www.medscape.com/viewarticle/775694>

Alcohol and drug use are leading causes of morbidity and mortality in young people in the United States. The American Academy of Pediatrics recommends that guidance re: substance use be incorporated into routine pediatric clinical care, and that patients

with addictions be managed in collaboration with child and adolescent mental health practitioners or addiction specialists. Boston Children's Hospital reports their unique, effective approach to managing young patients with alcohol, opioids, and buprenorphine use. Engaging both youth and parents, joint and separate meetings with a therapist/addiction specialists, involvement and coordination of multi-disciplinary teams, the need for a long-term approach, and other details are described.

Intellectual and Developmental Disabilities

Bloch MH, and Qawasmi A, **Omega-3 fatty acid supplementation for the treatment of children with attention-deficit/hyperactivity disorder symptomatology: systematic review and meta-analysis.** *J Am Acad Child Adolesc Psychiatry.* 2011 Oct; 50(10):991-1000. doi: 10.1016/j.

<http://www.ncbi.nlm.nih.gov/pubmed/21961774>

A meta-analysis of ten trials involving 699 children examined the efficacy of omega-3 fatty acid supplementation in children with ADHD symptomatology. Omega-3 fatty acid supplementation demonstrated a small but significant effect in improving ADHD symptoms. Eicosapentaenoic acid dose within supplements was significantly correlated with supplement efficacy. The study concluded Omega-3 fatty acid supplementation, particularly with higher doses of eicosapentaenoic acid, was modestly effective in the treatment of ADHD. The relative efficacy of omega-3 fatty acid supplementation was modest compared with currently available pharmacotherapies for ADHD such as psychostimulants, atomoxetine, or $\alpha(2)$ agonists. However, given its relatively benign side-effect profile and evidence of modest efficacy, it may be reasonable to use omega-3 fatty supplementation to augment traditional pharmacologic interventions.

Join us, won't you?

Sign up and gain FREE access to hundreds of members and their expertise through the member-only BHN Electronic Mailing List (EML)!

We have a wonderful exchange of information, ideas, and resources.

Find practice support and prompt responses to challenging questions.

To subscribe to the BHN EML:

- Send an email to BHN Membership Chair, Milton Stokes, MPH, RD, CDN at assistU@bhndpg.org
- Include First Name, Last Name, Email Address
- Please title the subject of the email as BHN LIST SUBSCRIBE

2011-2012: A Year of Firsts for Our DPG!

With the highest of membership to date, many BHN members help make strides in meeting our vision to **"Impact the nutrition of the behavioral health populations we serve."** According to Past Chair, Charlotte Caperton-Kilburn, MS, RD, CSSD, LDN, "during the 2011-2012 year, we had major accomplishments, particularly in member services. It was a year of firsts for our DPG." In her 2011-2012 Annual Report, Charlotte states "there is no way to include all of the efforts of BHN members as many of them are completed across the country. This summary attempts to provide the major highlights in which we have worked toward our goals." The annual report and financials for BHN 2011-2012 is available to members at www.bhndpg.org.

BHN-DPG Delegate's Report

Harriet H. Cloud, MS, RD

Council on Future Practice Visioning Report and Public Health/Community

A great deal of information has been sent to the House of Delegates (HOD) since the Fall 2012 HOD meeting. During the meeting, two mega issues were discussed: Council on Future Practice Visioning Report and the Public Health and Community role for the RD. Keeping up with these issues and their outcomes sometimes are not of "burning" interest to the members of the Academy. Unfortunately they are highly important in the professional life of all members of the dietetic profession.

Council on Future Practice Visioning Report: The Visioning Report was presented to the HOD during FNCE 2012 and was made available at www.eatright.org/hod to all members to read and provide feedback. Over 600 members provided electronic feedback to the report. The Report is still available on the HOD and Council websites. The Visioning Report is a vision of what is possible for future dietetics practitioners and educators. The recommendations are not for today, but for the years to come. While these recommendations are not mandates, they provide a starting point for creating a new future for the profession.

Follow-up information about the Visioning Report has been distributed to the HOD and other groups, including a recent report on activities that have occurred since the Fall HOD meeting. The report was generated from a joint meeting of ACEND, CDR, and Council on Future Practice, Education Committee and Nutrition and Dietetics Educators and Preceptors DPG. 38 members of the Academy attended a meeting January 17-19, 2013. The purpose was to come to consensus on addressing the recommendations of the Visioning Report in light of the feedback from members and the HOD dialogue session. Based on the discussion during the meeting some design principles emerged in improving the current system:

1. Ensure competent practitioners to protect the public and improve the

health and well-being of patients, clients and populations.

2. Improve educational preparation, credentialing and career continuum for the food and nutrition professional.
3. All levels of the continuum will be grounded in nutrition and dietetics knowledge and skills with greater expertise and more focused areas of practice at the higher levels of the continuum.
4. Anticipation of and preparation for future practice and requirements at all levels of the career continuum are necessary
5. Educational institutions will need time, resources and flexibility to pursue various approaches and models along with support from the Academy
6. Change will occur through a process that is transparent and inclusive
7. Change will be evolutionary
8. Change must occur within the parameters of present requirements and standards upheld by ACEND and CDR.

During the meeting, consensus was achieved on the following statements:

1. The DTR credential will be supported as long as it is financially viable and relevant in the practice environment
2. Baccalaureate degree prepared individuals will have a set of knowledge, skills and competencies for eligibility to qualify for an examination based on a practice audit.
3. These credentialed baccalaureate degree individuals may choose to pursue other educational opportunities along with other professional options for advancement.
4. A graduate degree which integrates supervised practice into the curriculum will become entry for the RD or RDN credential after passing an examination based on the practice audit.
5. Based on personal choice, nutrition and dietetic professionals may use the professional designation of RD

or RDN starting in 2013.

6. Specialist and advanced practice education and credentialing were re-affirmed as necessary for the future success of dietetics.

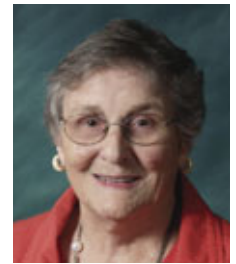
If implemented, this report brings about the need for member/DPG involvement as part of the designers. It is a great opportunity for members of DPGs to participate in the future of dietetics. For those BHN DPG members who want to read the entire report you can find it on www.eatright.org/HOD > Fall Meeting Materials.

Spring HOD Meeting —May 2013

The Spring 2013 HOD meeting (May 4-5, 2013) is the 5th annual virtual meeting for the House and will focus on Hunger in America: Food and Nutrition Insecurity affects all RDs and DTRs.

The mega issue question being addressed is: How can we as Academy members increase our awareness of food and nutrition insecurity and demonstrate our commitment to take action? A backgrounder has been written covering this issue can access by all members on the HOD website: <http://www.eatright.org/hod> >Spring Meeting Materials. The spring meeting will be open only to delegates. For that reason I will be seeking your input to this issue after you have read the materials available. BHN members may provide feedback on Food and Nutrition Insecurity by going to this survey link; <http://www.surveymonkey.com/s/S53987R>.

Food insecurity and hunger have important implications for the health of all individuals and especially children. Many individuals served by BHN-DPG members have problems with accessing those programs addressing food assistance and hunger. If time does not permit reading the entire background paper, there is an Executive Summary which provides an excellent overview of this important issue.



Behavioral Health Nutrition Executive Officers 2012-2013

Chair

Therese Shumaker, MS, RD, LD
Minnesota 507-281-8047
shumaker.therese@mayo.edu

Chair-Elect

Mary Kuester, MA, RD, LD
Colorado 763-242-6076
marykuester@comcast.net

Past Chair

Charlotte Caperton-Kilburn, MS, RD, CSSD, LDN
South Carolina 901-409-4411
nflperformance@yahoo.com

Treasurer

Cary Kreutzer, MPH, RD
California 323-361-3830
CKreutzer@chla.usc.edu

Secretary

Ellen Griffiths, MPH, RD, LDN
Maryland 301-422-5432
Ellen@griffithswellness.com

Nominating Committee Chair

Minh-Hai Tran, MS, RD, LD
Washington 206-228-3152
mh@mindfulnutritionseattle.com

Membership Chair

Milton Stokes, MPH, RD, CDN
Connecticut 917-697-7614
miltonstokes@gmail.com

Publications Chair

Karen Wetherall, MS, RD, LDN
Tennessee 865-974-6256
kbalnick@utk.edu

Public Relations Director

Adrien Paczosa, RD, LD
Texas 512-547-9274
adrien@iLiveWellNutritionTherapy.com

Public Policy Liaison

April Winslow, RD
California 831-204-8344
april@choosetochangenutrition.com

DPG Delegate

Harriet Cloud, MS, RD, LD
Alabama 205-871-0582
harriet.h.cloud@gmail.com

Website Coordinator/Editor

Nina Crowley, MS, RD, LD
South Carolina 843-737-2372
crowley@muscu.edu

Social Media Coordinator

Lindsay Stenovac, MS, RD
California 619-733-9939
Lindsay.ek.stenovac@gmail.com

DPG Relations Manager

Susan DuPraw, MPH, RD
The Academy of Nutrition and Dietetics
312-899-4814

sdupraw@eatright.org

STUDENT COMMITTEE

Student Liaison Chair

David Wiss
California 310-403-1874
David.Wiss.65@my.csun.edu

Student Member

Kelsey Wallour
Tennessee
krunr20@gmail.com

RESOURCE PROFESSIONALS

Addictions

Renee Hoffinger, RD
Florida 352-374-4478
renehoffinger@gmail.com

Eating Disorders

Karen Wetherall, MS, RD, LDN
Tennessee 865-974-6256
kbalnick@utk.edu

Intellectual and Developmental Disabilities

Lester Rosenzweig, MS, RD, CDN
New York 518-229-1542
lesterr@arcschenectady.org

Mental Health

Tegan Medico, MS, MPH, RD, LDN
Tennessee 484-264-8021
timedico@gmail.com

NEWSLETTER TEAM

Editor
Diane Spear, MS, RD, LD
Oklahoma 918-637-2096
newsletter@bhndpg.org

Assistant Editor

Angela Lee, MS, RD, LD
Florida 706-832-8699
ale3366@gmail.com

Student Assistant Editor

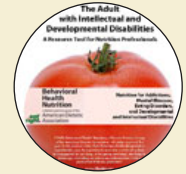
Open Position

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

BHN PUBLICATIONS

The Adult with Intellectual and Developmental Disabilities

This resource tool is designed to provide an overview of nutrition in individuals with intellectual and developmental disabilities. The resource guide is contained on one CD-ROM as a 209 page PDF file. **BHN Member Price: \$25.00**



Psychiatric Nutrition Therapy

This resource guide is intended for anyone working in the 4 practice areas within Behavioral Health Nutrition: mental illness, eating disorders, addictions, and those with intellectual and developmental disabilities who also require psychiatric care. The resource guide is contained on one CD-ROM as a 170-page PDF file. **BHN Member Price: \$25.00**

Nutrition & Addictions

This is a 244-page manual of information about addiction and drugs of abuse, including legal, illegal and pharmaceutical drugs, alcohol, nicotine, caffeine, and more. Patient educational handouts on nutrition and recovery topics are also included. **BHN Member Price: \$18.00**



To order, visit

<http://www.bhndpg.org/publications/index.asp>

NEW! Academy of Nutrition and Dietetics Pocket Guide to Children with Special Health Care and Nutritional Needs

This pocket guide was developed through collaboration of the Behavioral Health Nutrition and Pediatric Nutrition dietetic practice groups of the Academy. This updated version contains the essentials to nutrition management in a comprehensive interdisciplinary approach to medical management of CSHCN. Up to date scientific evidence has been translated by the authors and editors into tables and practice guidelines for dietetic professionals.



To order, visit

<http://www.eatright.org/shop/product.aspx?id=6442467529> (print only)

Or at

<http://www.eatright.org/shop/product.aspx?id=6442467916> (print + online set).

BHN: Fuel Your Brain, Feel Your Best!

NEW! 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.

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

Academy of Nutrition and Dietetics website: <http://www.eatright.org>

BHN website: <http://bhndpg.org> • BHN practice standards: <http://bhndpg.org/moa/practice/index.asp>

