
Eating Disorders Review
July/August 2018
Volume 29, Issue 4
Scott Crow, MD, Editor-in-Chief

Orthostatic Hypotension and Tachycardia in Adolescent Patients with Anorexia Nervosa: A Marker of Illness Severity

By **Barbara Kessel, DO**, University of Colorado Denver, Aurora, CO, and
Philip S. Mehler, MD, Eating Disorders Recovery and University of Colorado, Denver

Adolescents with anorexia nervosa (AN) generally present with similar physiologic changes from starvation as are seen in adults. One common sign is orthostatic hypotension and tachycardia, which are increasingly detected as the severity of AN increases.

Orthostatic hypotension can cause syncope, dizziness, weakness, and lightheadedness. Orthostasis is defined as a drop in systolic blood pressure >20 mmHg with or without a drop in diastolic blood pressure >10 mmHg, or an increase in heart rate >20 beats per minute (bpm) upon standing. Of note, a very recent study demonstrated that finding an orthostatic drop within the first minute after standing more accurately predicts dizziness and future adverse events than finding it at the long-recommended 3 minutes [Juraschek, 2017].

In one retrospective study of 36 adolescents with AN [Shamim, 2003], time to resolution of orthostasis was defined as the day after which the patient was no longer orthostatic for 48 hours. In Shamim's study, 60% of adolescent patients with AN had orthostasis on admission, and this number increased to 85% by the fourth day after admission. Normalization of pulse changes was achieved at around 3 weeks; on average, patients were 80% of ideal body weight (IBW) at the time of resolution. Shamim's study also found that orthostatic pulse changes were more sensitive indicators of hemodynamic instability than were blood pressure changes, and the orthostatic changes took longer to resolve. Similar results were found in a smaller study by Hill and Maloney, who found that the mean number of days until patients were no longer orthostatic was 27, and orthostatic hypotension was resolved when patients achieved a mean IBW of 79.5%.

A Marker of Instability

It is well established that the cardiovascular response to prolonged starvation is compensatory bradycardia and hypotension, due to the profound parasympathetic predominance at low body weights [Sachs, 2016]. However, tachycardia in patients with AN may be predictive of arrhythmia and risk of sudden death when associated with excessive sympathetic nervous system activity [Krantz, 2004]. An elevated heart rate may indicate a cardiac compensatory mechanism for congestive heart failure, and has been described during refeeding AN patients. Therefore, closer medical monitoring is recommended when an adolescent patient presents with elevated heart rates and demonstrates orthostatic changes.

A residential or inpatient level of care may be prudent for patients with significant orthostatic changes. In

one study of adolescent males with AN [Siegel, 1995], four of 10 patients presented with relative tachycardia (heart rates of 80 bpm or greater), and three out of four developed life-threatening complications, including severe electrolyte disturbances and congestive heart failure; one patient had cardiopulmonary arrest.

In Tokumura's study of 40 female adolescents with AN, in which an unfavorable outcome was defined as <85% of age- and height-specific standard weight, and absent or nearly absent menstruation, tachycardia at rest in the convalescent period was associated with an unfavorable 5-year outcome for patients with child- and adolescent-onset AN. It is suggested that adolescent patients with AN who have higher heart rates at rest are affected by more severe autonomic nervous dysfunction than those with bradycardia, thereby having poorer long-term outcomes [Tokumura, 2012].

Thus, one might conclude from the literature that the presence of orthostatic changes may indicate a compensatory mechanism for a patient's malnutrition, and serves as a marker of more severe illness. For more refractory of symptomatic patients with AN and orthostatic hypotension, a trial of clonidine, fludrocortisone, midodrine or coenzyme Q10 may be worth considering [Rembold, 2018].

About the Authors

Dr. Mehler is President, Eating Recovery Center, and Founder and Executive Medical Director of ACUTE at Denver Health. He is also the Glassman Professor of Medicine at the University of Colorado School of Medicine, Denver. He is author of 425 scientific publications, including 3 textbooks. One, *Medical Complications of Eating Disorders*, published by Johns Hopkins University Press, is now in its third edition. His newest book (with Arnold Andersen, MD), *Eating Disorders: A Guide to Medical Care and Complication*, was released in November 2017.

Dr. Kessel is a specialist in child and adolescent psychiatry at the University of Colorado-Denver, Aurora, CO.

References

Hill KK, Maloney M. A new way to assess discharge weight in anorexia nervosa. Scientific Proceedings, 43rd Annual Meeting of the American Academy Child and Adolescent Psychiatry, 1996. Abstract NR-175, p. 128.

Juraschek SP, Dayd N, Rawlings AM, et al. Association of History of Dizziness and Long-term Adverse Outcomes with Early vs Later Orthostatic Hypotension Assessment Times in Middle-aged Adults. *JAMA Intern Med.* 2017; 177:1316-23.

Krantz MJ, Mehler PS. Resting tachycardia, a warning sign in anorexia nervosa: case report. *BMC Cardiovasc Disord.* 2004; 4:10.

Rechlin T, Weis M, Ott C, Bleichner F, Joraschky P. Alterations of autonomic cardiac control in anorexia nervosa. *Biol Psychiatry.* 1998; 43:358-63.

Rembold CM. Coenzyme Q10 Supplementation in Orthostatic Hypotension: A report on 7 Cases. *Am J Med.* 2018;131:444-46.

Sachs KV, Harnke B, Mehler PS, Krantz MJ. Cardiovascular complications of anorexia nervosa: A systematic review. *Int J Eat Disord.* 2016; 49:238-48.

Siegel JH, Hardoff D, Golden NH, Shenker IR. Medical complications in male adolescents with anorexia nervosa. *J Adolesc Health.* 1995; 16:448-53.

Shamim T, Golden NH, Arden M, Filiberto L, Shenker IR. Resolution of vital sign instability: an objective measure of medical stability in anorexia nervosa. *J Adolesc Health.* 2003; 32:73-7.

Tokumura M1, Watanabe H, Esaki T. Convalescent resting tachycardia predicts unfavorable outcome of anorexia nervosa. *Pediatr Int.* 2012; 54:844-48.

UPDATE: Gender Differences and Peer Pressure on Appearance

While perfectionism and concern about body image are long-time topics investigated among women, much less research has been done into the effects on men. According to a team at Virginia Commonwealth University, Richmond, VA, ever-higher rates of body dissatisfaction are being recorded among men. These may be related to increased pressure on appearance and more image awareness among men. The Virginia researchers reported the results of their recent study at the International Conference on Eating Disorders meeting in Boston. Although the overall test model was used was among 700 undergraduate students and was significant in men and women, the 521 women in the study reported greater family pressure and disordered eating symptoms than did men. No other significant differences emerged. As for eating pathology in men, only peer pressure explained the significant differences. These preliminary results suggest that peer pressure might be an important source of disordered eating among men.

From Across the Desk

This issue touches on a variety of studies of eating disorders, from cardiovascular disorders to a new drug combination for binge eating disorder, and some benefits and drawbacks of social networks and Internet tools.

Orthostatic hypotension has well-known symptoms include syncope (fainting), dizziness, weakness, and lightheadedness. In this issue, our lead article, **Orthostatic Hypotension and Tachycardia in Adolescent Patients with Anorexia Nervosa: A Marker of Illness Severity**, by Barbara Kessel and Philip S. Mehler, underscores the importance of orthostatic hypotension and tachycardia and the implications for treatment of patients with anorexia nervosa.

In a change of pace, the issue looks at cyber-bullying (**Cyber-Bullying and Disordered Eating Among Teens**) and the effects on disordered eating and a Danish study of a new app that helps patients recovering from an eating disorder track their progress (**A Self-monitoring App for Those Recovering from an ED**). The authors remind us that by 2017, more than 325,000 health-related apps were available to mobile phone users worldwide. Would the new app, Recovery Record, fulfill its promise? An unexpected result: while the reaction was very positive, some patients found the app intrusive and counterproductive.

— MKS

Cyber-Bullying and Disordered Eating Among Teens

More than half of teens in a Spanish study had been bullied on the Internet.

Cyber victimization has been defined as “unwarranted, intentional, and prolonged aggression between peers” that occurs via electronic media, particularly social media. It can produce psychopathology, including depression, anxiety, and even suicidal ideation. A recent study adds to our knowledge of cyber-bullying’s effect on disordered eating among teens.

Body appearance is a common focus of cyber-bullies, who send harassing emails or text messages about an individual being “fat” or “ugly,” along with derogatory images about the targeted person over the

Internet. In one study by Cassidy et al. (*School Psychol Int.* 2009; 30:383), 30% of teens reported being cyber-bullied because of their size or weight. Another study in 2017 found that being cyber-bullied by peers leads to body dissatisfaction (*J Interpers Violence*. doi: 10.1177/0886260517725737).

Drs. Jose H. Marco and M. Pilar Tormo-Irun, of the International University of Valencia, recently reported the results from their study of 676 Spanish teens (367 girls and 309 boys; mean age: 14.3 years) from several cities in Spain (*Front Psychology*. June 14, 2018, doi: 10.3389/fpsyg.2018.00987).

Drs. Marco and Tormo-Irun used three questionnaires, including the *Multidimensional Body-Self Relations Questionnaire-Appearance Scales*, a 34-item self-report inventory of 5 subscales (appearance evaluation, appearance orientation, body areas satisfaction, oversight preoccupation, and self-classified weight). The participants completed two additional questionnaires, the Spanish version of the *Eating Attitudes Test* (EAT-40), and the Spanish version of the *European Cyberbullying Intervention Project Questionnaire* (ECIPQ). For the ECIPQ, the authors selected the Cyber Victimization subscale only, which is made up of 11 items investigating whether the study participant had been a victim of specific insults, including threats, taking personal information, identity theft, and dissemination of intimate photos, retouched photos, and rumors.

More than half had been attacked by cyber-bullies

Remarkably, during the preceding 2 months, 57.5% (389) of the study participants had been insulted or threatened, or had personal information taken, experienced identity theft, had bullies publish intimate photos, retouched photos, and rumors spread through messages, the Internet, and social networks. Rates did not differ between the girls and boys on the cyber victimization scores when age was controlled; this finding agreed with results from earlier studies.

Results from the three questionnaires showed that preoccupation with being overweight, and cyber victimization were all significant predictors of the EAT-26 score. The authors stressed the importance of assessing the psychopathology of eating disorders in teens victimized by weight- or appearance-based cyberbullying.

Steps to Trip up Cyber-bullies

A number of volunteer organizations have been formed to fight back against bullying and cyberbullying. Ditch the Label, an anti-bullying charity in the United Kingdom, recently published suggestions for ways to respond to cyber-bullying. Here are a few of their suggestions:

1. Never respond to an Internet bully, and especially do not try to retaliate by doing the same thing back.
2. Take a screenshot of anything that may be cyber-bullying, and keep a record of it on your computer.
3. Block and report the offending user to the appropriate social media program.
4. Ditch the Label officials suggest that although you may not feel like talking about the abuse, it is always helpful to seek support and avoid trying to handle the bully by yourself.
5. Weigh how serious the cyberbullying is. If it is just slight name calling from an unknown person, it may be easier to block it and report the abuser.
6. If the cyber-bully is someone at school or college, report it to a teacher. If the bullying is threatening, contact the police or a trusted adult as soon as possible.
7. Be private about your social media. Keep social media privacy settings high, and do not connect with anyone you don't already know offline.

An Unhealthy Trio: BMI, BED, and Suicidality

Binge eating was associated with suicidality in one recent study.

Although binge eating disorder, or BED, is the most common eating disorder in the U.S., its course is less studied and understood than other EDs. Even fewer studies have assessed any relationship between BED and suicidal behaviors.

Researchers at the Virginia Commonwealth University and the University of Michigan recently examined data from the 2001-2003 Collaborative Psychiatric Epidemiologic Surveys (CPES), which included information from 14,497 subjects (*BMC Psychiatry*. 2018; 18:196). The CPES is derived from three nationally representative cross-sectional household surveys designed to estimate the prevalence of psychopathology among adults older than 18. The surveys give specific attention to racial/ethnic minorities.

Dr. Krystal Lyn Brown and colleagues used the *CPES Composite International Diagnostic Inventory*, or CIDI, to assess binge episodes and BED. Suicidal ideation was indexed by a CIDI module that assessed thinking about suicide or made a plan for committing suicide. The researchers also recorded data about lifetime suicidality.

Dr. Brown and colleagues found that about 4% of adults had a lifetime history of binge-eating episodes and 1.9% had a history of BED. Respondents with BED were younger, mostly female, and more likely to be obese than those with BED. Interestingly, a lifetime history of suicidality and prior suicide attempts were more common (roughly one and one-half to threefold higher) in those with BE episodes, and in those with BED.

Binge-eating behaviors and BMIs linked to suicidal ideation

Based on their study results, the authors reported that both binge-eating behaviors and body mass index (BMI) are independently related to suicidal ideation and attempts among U.S adults. The relationship between binge eating and suicidal was highest among those with higher BMIs. They also noted that the recent addition of BED to the *DSM-5* may help produce new conversations about the relationship between body weight, weight-control messages, and interventions, and mental health.

Paired Medications Show Promise for Binge Eating Disorder Patients

New trials feature a phentermine-topiramate combination.

While drug development for AN and BN is quiescent, BED remains an active target for medication treatment development. Results from a recent pilot drug trial suggest a new option for BED patients.

Combining phentermine and topiramate for obese BED patients

In a small study of 10 obese or seriously overweight patients, Anna Guerdjikova, PhD, LISW, and colleagues at the Lindner Center of HOPE in Mason, OH, and the University of Cincinnati College of Medicine tested a combination of phentermine and topiramate in an open-label, prospective 12-week trial. The combination appeared to lead to loss of weight, and significant reductions in weight, body mass

index, and importantly, frequency of binge-eating, global clinical severity, eating pathology, and obsessive-compulsive symptoms (*Innov Clin Neurosci*. 2018; 15:17).

Seven out of 10 people completed treatment. The most common side effect reported in the study was dysgeusia, or disruption of the normal sense of taste. Notably, doses were lower than those used in monotherapy (7.5 mg phentermine and 46 mg of topiramate). The authors suggested that patients who cannot tolerate higher doses of topiramate alone might benefit from lower doses of topiramate combined with phentermine. The authors stress that this was a short-term uncontrolled study and larger randomized, placebo-controlled trials will be needed.

A Self-monitoring App for Those Recovering from an ED

Patient reactions were mixed in one Danish study.

By 2017, more than 325,000 health-related apps were available to mobile phone users worldwide. Apps available for eating disorders patients might help normalize eating patterns and weight, especially in early treatment phases, and for those who are resistant to filling in traditional pen and paper diaries. The apps also fit in with blended treatment, where using digital tools and traditional face-to-face treatment combine to save costs and increase geographical outreach.

Recently a Danish team reported the results of their study of Recovery Record (RR), a self-monitoring app for ED management. RR issues log questions on the user's meals, behavior, feelings and thoughts. Clinicians use the clinician interface of the app. RR includes "nudging" features, such as meal reminders and affirmations after a meal log, encouraging users to monitor themselves and to eat regularly. The app also includes personalized goals and coping strategies in an in-app meal photos. In another feature, the app includes game-like principles in a non-game setting.

In what the authors believe is the first in-depth study of patients using an eating disorders treatment app, Pil Lindgreen, MSc and colleagues at Aarhus University Hospital, Risskov, Denmark, recruited 41 participants from a specialty eating disorders treatment center at Aarhus University Hospital (*JMIR Mhealth*. 2018; 6(6): e10253). This facility treats patients with moderate-to-severe EDs in outpatient and inpatient departments. The researchers used individual interviews, 1 focus group meeting and one face-to-face interview (83 minutes). Each individual was shown a screen shot of each RR feature, and asked to comment on the relevance of the feature to their treatment. Most Interviews were conducted at the study center; 11 patients preferred being interviewed at home.

While overall the patients were positive about using the app, and found it supportive in their everyday life and their eating disorders treatment, some found parts of the app program obstructive and counterproductive. The message, according to the authors, was for patients and clinicians to collaborate and determine how the individual app best fit the preference and treatment needs of individual patients.

The authors stressed the need for thorough and clear guidelines on the use of such apps in ED treatment. Also, much more research is needed to better design the content and design of such apps, and the authors suggest patients and clinicians explicitly discuss how to apply a specific app in treatment and to the patient's everyday life.

Eating Disorders Occur at Midlife, Too

The mean weight loss from weight suppression was 16 Ib.

Although eating disorders are most often diagnosed in teens and young adults, there has been a recent increased focus on EDs in people beyond their teens and 20s. The results of a recent study remind us that disordered eating and eating disorders can occur at any age.

Erica L. Goodman, MA, from the University of North Dakota, Fargo, and colleagues recently investigated weight suppression (WS) among a community sample of 1,776 women from 50 to 89 years of age (mean age: 59 years) (*Int J Eat Disord.* 2018; doi:1002/eat.22869). The women were all participants in the Gender and Body Image (GABI) Study, which examined the physical and psychological experience of aging, the injustices, and the inequities and challenges of aging (*J Women Aging.* 2017; 29:3).

The authors noted that most women experience an increase in body mass index (BMI) over their lifetime, and changing weight patterns at midlife may be a marker of the development of midlife EDs and body dissatisfaction. Weight suppression (WS) is associated with concerns about weight, weight-loss practices, and low-fat eating behavior, along with higher levels of restraint, drive for thinness, and dieting behaviors. The authors noted that most women experience changes in weight, and gain an average of 1 lb per year.

In the current study, women 50 years of age or older completed an online survey that gathered demographic information and eating psychopathology information. The authors particularly were looking for changes in BMI, binge eating and purging, weight control, checking behaviors, and overvaluation of weight and shape.

The majority had tried to suppress weight

Eighty-five percent of the women participating in the study had a history of attempts to suppress their weight, and the amount of weight lost ranged up to 260 lb (mean weight suppression: 16 lb). The authors' original hypothesis that women with high WS and weight elevation (WE) scores would experience more eating disorder symptoms than those who were low on one or both measures was supported. They also found that higher levels of WS and weight increases enhanced an individual's risk for skipping meals over the lifetime. Higher WS ratings would indicate that a woman at midlife would be at greater risk of weight checking, overvaluation, binge eating and lifetime fasting.

These findings suggest weight elevation may be an important factor in need of further study.

Sleep Disorder Are Common among ED Patients

A study in Cairo concludes that some sleep disorders are more frequent than others.

According to researchers at the Cleveland Clinic, about 70% of Americans regularly experience some form of disordered sleep, and disordered sleep is prominent in many kinds of psychopathology. Curiously, sleep is a neglected topic in EDs, even though many people with EDs complain of physical problems, particularly interruptions of their normal sleep patterns. A group of researchers at Ain Shams University, Cairo, have recently completed a rigorous study of sleep in people with EDs (*Sleep Medicine.* 2018; 48:113).

Dr. Tarek Asaad Abdou and colleagues designed a cross-sectional observation study to investigate the sleep cycle of female anorexia nervosa (AN) and bulimia nervosa (BN) patients and healthy matched controls. The Egyptian researchers used a structured sleep disorder questionnaire and all-night polysomnography (or "sleep study") to compare sleep in both groups.

All the women in the study had no comorbid physical illnesses or any neurologic disorders. Patients with

AN who had body mass indexes (BMIs) less than 15 mg/kg² were excluded from the study. A control group of 20 healthy individuals were matched for age and gender. The authors administered the Beck Depression Inventory II to the patient group only, to assess the presence and severity of depression. Patients and controls also had sleep assessments with the *Structured Sleep Disorder Questionnaire* and an all-night PSG. The assessment also included electrooculography (used to measure eye movements during sleep), electromyography of the chin and leg, EKGs, and measurements of respiratory effort snoring and oxygen saturation levels, along with body positions during sleep. The tests were performed after the patients had been medication-free for at least 7 days.

Significant differences were identified

Twenty-three female patients 20 to 40 years of age (mean: 30 years), 9 with AN and 14 with BN, took part. The authors found statistically significant differences between the patients and controls. Among the eating disorders group, there was longer sleep latency (or time needed to fall sleep), reduced sleep efficiency, and significant increases in the arousal index compared to controls. Other differences emerged in REM sleep findings—there was twice as much stage 2 non-REM sleep in the patients as in the healthy controls. There were no significant differences between the two groups in obstructive sleep apnea, or periodic leg movements.

All sleep complaints, including all types of insomnia, daytime sleepiness and parasomnias, were more common in both AN and BN patients compared to controls. The most common complaint was initial insomnia (56.5% of ED patients). The next most common sleep disorder was interrupted sleep, which affected 48% of patients. Late insomnia and daytime sleepiness affected 22% of the patients.

Sleep changes could not be explained by depression alone. The authors confirmed that sleep and EDs are highly correlated, and they also called for future research into sleep and eating disorders.

Military Veterans Are Seldom Screened for Eating Disorders

The nature and culture of military life increase the risk.

Most VA medical centers do not regularly screen patients for eating disorders, even though increased access to care for individuals with EDs is particularly relevant to veterans, according to J.C. Huston and colleagues at the National Center for PTSD at the VA Boston Healthcare System in Boston (*Int J Eat Disord.* 2018;doi: 10.1002/eat.22885). However, this recent paper examining health care use among veterans with EDs is one sign that EDs are receiving more attention in the VA setting.

The authors call attention to aspects of military life, which includes strict weight and fitness requirements, exposure to combat, and military sexual trauma, may increase the risk of developing eating disorders among men and women veterans. The authors hypothesized that female veterans with eating disorders would report greater health care utilization and worse quality of life than would female veterans without eating disorders.

A sample pool of 700 randomly selected female veterans was recruited from a larger sample of randomly selected female veterans 18 years of age or older in New England (10,840 women in fiscal year 2011). Study participants were drawn from the Veterans Healthcare Administration (VHA) Corporate Data Warehouse, which has names and addresses taken from VHA electronic files. From this group, 581 veterans could be located and received a survey and 198 (28.2%) completed the study.

Surveys were mailed to all potential participants between February and April 2013. The participants

completed a number of questionnaires, including the Eating Disorder Diagnostic Scale, a 21-item scale used to measure a range of ED symptoms. The study looked at participants' use of healthcare services during the past 12 months, using data from the National Survey of Veterans, 2010. Other instruments included the CES-D for depression and the Post-Traumatic Stress Disorder Checklist-Civilian, which measures the frequency of *DSM-IV* PTSD events during the past 30 days.

About 10% had ED symptoms

Many participants in the study—10.6%—met criteria for probable AN, BN, or BED. The authors found that the average frequency of VA medical care visits was higher in those with EDs. Use of substance use disorder services was also higher in those with EDs.

The frequent use of VA mental health and substance abuse services observed among women with probable ED underscores the need for ED screening in the VA setting. While the VA healthcare system provides extensive mental health services and treats obesity, effective ED treatment is also clearly needed.

An Emotionally Expressive Writing Intervention

Putting positive reactions on paper led to one positive result.

Expressive writing (EW), which involves nonstop writing or journaling about a stressful or traumatic experience for 15 to 20 minutes for 3 to 5 consecutive days, has been studied for individuals with social, behavioral, and psychological concerns. The results have been mixed: some suggest this technique helps subjects deal with a range of social, behavioral, psychological, and health concerns, while other studies have not shown lasting effects.

Modifications to EW procedures have also been made, in which the duration and or frequency of writing and the location (lab vs. home) are altered in hopes of increasing impact. One such change has been to concentrate on positive aspects of one's life rather than on negative or stressful events.

EW has been applied to patients with eating disorders and may be helpful during recovery (*Eur Eat Disord Rev.* 2010; 18:180). Some work suggests it may diminish the effect of stress on eating pathology, as was shown in a student population (*Psychology and Health.* 2012; 27:210) and may also improve body image in a group of undergraduates (Lafont, master's dissertation, Texas State University, 2011).

Dr. Nuriye Kupeli and fellow researchers at University College, London, recently tested the effects of an Emotionally Expressive Writing intervention (EW) on 71 female student volunteers before they were scheduled for a round of exams. Could writing about intensely positive experience influence changes in eating pathology and weight during an exam period, and would changes in eating pathology and weight be due to changes in affect regulatory systems and processes?

The students filled out several questionnaires, including the Eating Disorder Examination Questionnaire (EDE-Q), the Perceived Stress Scale-4 (PSS-4), the Short Depression-Happiness Scale (SDHS), a 6-item questionnaire that measures greater depressed mood and greater happiness, the Social Comparison Rating Scale (SCRS), Vulnerable Attachment Style Questionnaire (VASQ), and forms of the Self-Criticizing/Attacking and Self-Reassuring Scale.

Two writing groups, two different assignments

Next, the participants were assigned to one of two writing conditions: writing about "the most wonderful experience in your life â€¢ happiest moments," and to try to imagine yourself at that moment."

Participants were asked to write about the experience in as much detail as possible, making sure to include feelings, thoughts, and emotions. In a second group (controls), the students were instructed to write a review of a film or book they had recently seen or read. On the second and third days of writing, the controls were instructed to either write about the same positive experience/film/book as the day before or they could choose to write about another positive experience/film, or book.

After each writing session, the participants rated their mood, and completed a 3-item scale that measured how "personal and meaningful". Follow-up ratings were collected after 8 weeks.

Immediate and longer-lasting effects

Compared with the control group, the EW participants reported significantly higher mood levels than controls, and also indicated that they felt their diary entries were more personal and meaningful with each writing session. Immediately after EW, mood was improved.

Dietary restraint, but none of the other EDE-Q subscales, was significantly reduced in the EW group; there were no significant reductions of any EDE-Q subscale among the controls. No changes in body mass index were recorded in either group. Those who had improved dietary restraint scores wrote significantly more words over the writing period compared to those with no improvement.

These findings were similar to those of earlier studies. There was no immediate explanation for the changes in dietary restraint. The authors speculated that "dietary restraint is a more threat-based construct, based on fear of weight gain and the risk of breaking dietary rules, while the other subscales of the EDE-Q include elements of dissatisfaction and the desire to change (improve) rather than just the fear of negative change." The authors were appropriately cautious about their findings and noted the need for replication; nonetheless, the results are intriguing.

Questions and Answers - Eccentric Eating or an Eating Disorder?

Q. Recently our clinic has received a number of calls from teachers worried about unusual eating patterns they have noticed in students. Is there any general rule that might help differentiate diagnosable EDs, such as ARFID or unspecified eating disorder from atypical idiosyncratic eating habits in general? (LJG, Fort Worth, TX)

A. This is a good question, particularly in our present-day multicultural world with hundreds of different diets, including diets based on religious tenets, vegetarian diets, weight control diets, and bizarre or abnormal eating habits. Some students eat only at very specific times, eating foods of a single color, eating only when facing a certain direction, and so forth. Shulamith Kreitler, PhD, of Tel Aviv University, has written an interesting article addressing this very subject (*Isr J Psychiatry*. 2017; 54:8)

Dr. Kreitler focused on eating behaviors that fall short of clinical diagnosis and yet might signal disordered eating. Dr. Kreitler studied 250 students from 16 to 18 years of age (130 girls and 120 boys) from three different high schools in Tel Aviv. The students were given 3 questionnaires: the questionnaire for eccentric eating habit (EEH), which assesses tendencies for unusual eating habits and preferences. The second questionnaire was the *Eating Attitudes Test* (EAT-26). A third instrument, and perhaps most pertinent to the team's goals, was the *Cognitive Orientation Questionnaire of Eating Disorders* (CO-ED), which assesses the tendency toward eating disorders by examining the individual's beliefs about eating.

Of the entire group of students tested, 29, or 11.6%, of both genders scored above 20 on the EAT-26, which indicated possible eating disorders. Most interestingly, the correlations between low scores on the

EEH and EAT-26 were low, suggesting the two assess largely different domains, and that eccentric eating behaviors may be just that, rather than signs of an ED.

According to the authors, much more research is needed to differentiate eccentric behaviors from true eating disorders.

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Coming in the July/August Issue

In the Next Issue

- **The Benefits of Increased Vitamin N**

By Sandra Wartski, Psyd, CEDS

Nature, or vitamin N, can provide incredible physical and psychological benefits for patients with eating disorders. Spending more time in Nature may be an intervention that more clinicians need to consider as part of treatment for an eating disorder.

- **Small Feedings and Current Nutrition Practices in Anorexia Nervosa**

By Meghan Foley, RD, Carrie Schimmelpfennig, RD, MS, and Philip S. Mehler, MD, FACP, FAED, CEDS

A true change in the art of refeeding is underway. In the past, daily calorie prescriptions for initial weight restoration were in the 5 to 10 kcal/kg range. However, higher dietary prescriptions are associated with a reduced length of in-hospital stay, with no increased risk of electrolyte disturbances or other adverse reactions.

PLUS

- **Implicit and Explicit Changes in Body Satisfaction**

and

- **Signs and Symptoms of Disordered Eating During Pregnancy**

and

- **Anorexia Nervosa and the Clinical Implications of Rapid Refeeding**

and

- **Results of a Nationwide Study of Compulsive Exercise in EDs**

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