

EATING DISORDERS REVIEW

Current Clinical Information for the Professional Treating Eating Disorders



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UPDATE

Using the Internet to Reduce Weight-Shape Concerns

An online intervention program effectively reduced concerns about weight and shape among 477 college-aged women at risk for an eating disorder. As reported by Dr. Barr Taylor and colleagues at the International Conference on Eating Disorders in Montreal at the end of April, the women were randomized to an 8-week online intervention ("Student Bodies") combined with a moderated support group, or to wait-list control group. The women then were followed for one year. After one year, the mean Weight Shape Concerns scale score dropped from 58.0 to 49.9 in the treatment group, but increased in the control group from 59.8 to 64.0. In both groups, body mass indexes remained stable and depression scores were high and remained stable. At one-year follow-up, self-reported vomiting rates were 3% in the treatment group compared to 9% among the control group. Comparative rates for the following behaviors were: laxative use, 2% vs. 1%; diuretic use, 2% vs. 5%; and driven exercise, 27% vs. 37%. The authors concluded that the one-year Internet-based psychosocial program led to significantly reduced weight-shape concerns and less compensatory behavior.

Some Highlights of the AED Meeting

Using the Internet to Deliver Therapy and Fighting Old Unhealthy Food Patterns

By Mary K. Stein
Managing Editor

"The toxic food environment in America" is the result of foods that are genetically modified and overprocessed, and the overwhelming financial power of food manufacturers, according to Kelly Brownell, MD, PHD, professor of epidemiology and public health at Yale University. Dr. Brownell was the keynote speaker at the 2005 International Conference on Eating Disorders in Montreal.

Other major factors that contribute to the environment that encourages weight gain, even while appearance standards remain severe, include easy access to high-fat and high-sugar foods, the fact that foods that are convenient and quick to prepare are more often unhealthy than those that take longer to prepare, and the artful promotion of unhealthy foods by food manufacturers, said Dr. Brownell.

while McDonald's spends \$500 million promoting far less healthful foods with their slogan, "We love to see you smile." In addition, many giant food-manufacturing companies heavily subsidize nutrition research, vastly overspending the amounts government agencies can offer, he said.

Marketing unhealthy foods directly to children is another troubling reality in the toxic food environment, said Dr. Brownell. He noted that a new frontier for exploiting children is the cell phone. The Global Positioning Systems (GPS) allow companies to know exactly where a child is at any appointed time, and can direct snack ads directly to them.

Dr. Brownell urged eating disorders specialists and obesity specialists to work more closely to help prevent obesity. The two groups haven't always worked well together, he said, and the greatest conflict has been over the role of dieting. One problem is that those who treat obesity see dieting as the solution, but dieting is problematic to eating disorders specialists. He suggested that if the two groups collaborated better, it could help prevent both eating disorders and obesity. "Each person in the room can make a more profound effect on improving nutrition than the government can,"

25% of all vegetables consumed in the U.S. each year are French fries

—Dr. Kelly Brownell

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because real victories occur at the grass-roots level, he said.

What can be done?

Individual clinicians can have an impact on healthier lifestyles by taking a number of steps, Dr. Brownell told the audience. First, they can work with the press in their local communities to get information out about healthy eating. Next, they can write to their legislators urging changes in food regulations and content. Third, they can work to change school policies in their own communities, such as getting rid of soft drink machines in schools. Clinicians can also organize groups to protest unhealthy foods in schools.

New Technology Is a Boon to BN Patients

Four presentations at a plenary session on "The Efficacy and Acceptability of New Technologies in the Treatment of Bulimia Nervosa" demonstrated how telemedicine, e-mail, Internet-based self-help programs, and CD-ROM-based cognitive behavioral therapy (CBT) programs may be options for clinicians to reach patients in remote areas or even those individuals who are otherwise unwilling to consult with healthcare professionals.

Dr. James E. Mitchell, chairman and professor at the University of North Dakota School of Medicine and President and Scientific Director of the Neuropsychiatric Research Institute, both in Fargo, ND, told the audience that empirically based psychotherapy programs are not generally widely available, especially in rural parts of the U.S. "Training therapists is impractical, and having therapists travel is not practical and undesirable as most insurance companies will not reimburse a person to drive four hours to treat a person in a rural area," he said.

Dr. Mitchell and his colleagues recently studied the effects of a telemedicine-based CBT program broadcast to 61 patients. This group was compared with 56 other patients, who received traditional face-to-face therapy. The BN patients were in rural areas of North Dakota and Minnesota. The subjects were randomly assigned to onsite treatment by a traveling therapist sent to the site

or to a telemedicine-based CBT. Those who were assigned to the telemedicine group never met the therapist and all work was done over the telemedicine network. All participants received 20 sessions over 16 weeks, and were assessed at 12 weeks and at 52 weeks after the end of treatment. Patients were mostly female, in their late 20s, and almost all were Caucasian.

At the end of treatment, there were no differences in eating concerns, or weight and shape concerns between the two groups. In both groups, baseline values robustly decreased after treatment, especially objective binge eating episodes and vomiting episodes. The group who had face-to-face CBT did have greater reductions in Hamilton depression scores. The total number of binges decreased at about the same rate in both groups. At the end of the study, abstinence rates were 37% in the telemedicine group, compared to 45% in the face-to-face treatment group.

Dr. Mitchell said, "I think we have demonstrated that CBT delivered via a telemedicine network is acceptable to patients; it is roughly equivalent to in-person therapy in terms of all the major outcome variables at follow-up." He noted that one group that might be particularly difficult to treat with TV-delivered psychotherapy are patients with Axis 2, cluster B personality problems who are more impulsive.

'You've Got Mail' and Therapy, Too

Dr. Paul Robinson, consultant psychiatrist at the Royal Free Eating Disorders Service, Royal Free Hospital, London, described a pilot program he and his colleagues designed to deliver therapy via e-mail to patients they had never met. Dr. Robinson sent e-mails to 15,000 students inviting them to contact him if they had bulimia nervosa (BN). Fifty-four students responded and 42 appeared to have eating disorders.

The final treatment group included 23 students: 18 had BN, 4 had binge eating disorder (BED), and 1 had an eating disorder not otherwise specified (EDNOS). Information packets were sent to all 23 subjects. Participants kept a diary, and the clinicians (Dr. Robinson and 2 psychiatrists trained in eating disorders) copied the diary, annotated it

and sent it back. Two mailings went to each student per week. The clinicians' e-mail messages also addressed various topics of concern, including advice on depression, physical complications of vomiting, and the need for assessment by the students' general practitioners.

Dr. Robinson and colleagues randomly assigned the students to one of three groups: e-mail bulimia therapy, 12 weeks of therapy delivered by e-mail (EBT), self-directed writing (SDW), and waiting list control (WLC). WLC subjects were on the waiting list for 12 weeks and then the students were randomly offered EBT or SDW. At 12 weeks subjects were reassessed.

At follow-up, 18.6% of participants had lost their eating disorder diagnosis; there was no change in the control group. EBT was more effective than control in reducing BITE severity scores. When they were first assessed, 83% of the subjects had no prior treatment for their eating disorder. After therapy, 84% of participants reported that they would be willing to undertake further therapy. About half said they would agree to face-to-face therapy, and about half preferred EBT. Overall, about two-thirds of the students agreed they would seek some form of therapy.

Among the few negative comments the researchers received were that the times between e-mails seemed a bit long, even though they heard from the therapists twice a week, and that sometimes the subjects did not receive the e-mails.

Dr. Robinson said some important further issues about e-mail treatment will need to be addressed. For example, there may be malpractice issues and challenges such as liability and insurance coverage. Future studies, looking at manualized EBT and therapeutic writing in greater detail, will be very helpful, he said.

Internet-Based Self-Help for BN

In the third presentation of the plenary session, Tony Lamb, MB, filling in for Fernando Aranda, PhD, of the University of Barcelona, Spain, described the SALUT project, an ongoing multi-country project to investigate ways of applying Internet technology to eating disorders treatment. Dr. Aranda and

his colleagues have found that Internet-based therapy programs seem to be an effective approach for treating patients with BN, especially when patients live far from hospital centers or when they do not have the time to come to therapeutic sessions.

The goal of the current study was to see if Internet-Based Therapy (IBT) was effective for reducing symptoms of binge eating and vomiting among BN patients, compared to a standard therapy or a waiting list group. The online study used a CBT self-help guide developed in the SALUT program. The trial had a 6-month cycle: 4 months of self-treatment and 2 months of follow-up. Contact with the therapist included 3 face-to-face evaluation sessions and a short weekly informational e-mail.

The subjects were females from 18 to 30 years of age. Thirty-one patients who received IBT were subsequently compared to two control groups: 31 patients who received brief psychoeducational group therapy, and 31 others who were on a waiting list.

After the patients completed the self-help guide, the frequency of binge-eating was reduced by 79% and the frequency of purging was reduced among 83% of patients. As Dr. Lamb noted, most participants thought the Internet program was easy to use. Other patients liked the fact that although the Internet was private, someone was watching over them and following their progress.

CD-ROM-Based Treatment of BN

Ulrike Schmidt, MD, PhD, of the Eating Disorders Unit at the Maudsley Hospital, London, described her group's experience with a CD-ROM program based on a CBT model. Their project is a stand-alone program that uses lots of audio clips, audiotapes, and a homework manual. The very interactive program also allows participants to receive personalized feedback. The 8-session program was offered at a pace of one session a week. The first few sessions help participants become oriented to the treatment model and they can individualize it. The later steps are related to learning how to change problematic behaviors, thoughts, and feelings.

Dr. Schmidt and her group examined

two cohorts of successive referrals to the Maudsley Hospital. In the first group, participants were given minimal guidance, greeted by researchers who helped them log on, and then at the end of the session they were helped to book another appointment. At all other times, they were left alone in the room with a computer. In the second cohort, researchers added three 20-minute sessions of therapist support, basically to review how the participants were doing. The participants were quizzed in great detail about how they viewed self-help in general and self-help with a computer using a questionnaire and qualitative reviews.

The results demonstrated in both groups were very comparable—about 80% of the participants who were offered treatment accepted it. According to Dr. Schmidt, this percentage is identical to occasions when her group suggests that a person see a therapist. Those who had guidance with a therapist had slightly better but not significantly different results.

What patients liked best. Patients who liked the program reported feeling mastery over inactivity in their own recovery. The 20% who did not like the CD-ROM program were less positive about the use of self-help for themselves. A survey of therapists in their unit and other eating disorders units around London showed that overall the therapists thought that computerized treatment was much more appropriate for patients with BN than for those with anorexia nervosa. Having familiarity with computerized treatment programs also played a role: those who lacked experience were much more concerned about its limitations, such as a lack of tailoring treatment to an individual's needs or lack of a therapeutic relationship. On the whole, CBT therapists were much more positive about computerized treatment and much less concerned about its limitation, according to Dr. Schmidt.

On the drawing board: a program for patients with anorexia nervosa. Dr. Schmidt and colleagues are developing a CD-ROM program for patients and parents of patients with anorexia nervosa. This program will use a motivational and CBT approach, to help improve communication skills, how to deal with

Evaluating Three Psychotherapeutic Approaches for Anorexia Nervosa

Virginia W. McIntosh, PhD and co-workers in New Zealand and at the University of North Carolina recently evaluated three different psychotherapeutic approaches for patients with anorexia nervosa (AN). While many randomized controlled studies have examined therapies for adults with bulimia nervosa, few controlled randomized studies have examined treatment for AN (*Am J Psychiatry* 2005;162:741).

Dr. McIntosh and colleagues studied 56 women with AN who were randomly assigned to one of three treatments: cognitive behavior therapy (CBT), interpersonal therapy, or a control treatment approach that combined clinical management and supportive psychotherapy (nonspecific supportive clinical management). All patients were treated with 20 sessions over at least 20 weeks, and were assessed after the 10th week of therapy and after her final session.

Some surprising results

Thirty-five women completed therapy. Among the 21 others who did not complete the study, dropouts occurred over the course of therapy. Reasons for leaving the study included dislike of the therapy, moving from the area, and for unexplained reasons. Four were hospitalized for weight loss or complications of AN (3 in the interpersonal psychotherapy group, and 1 assigned to nonspecific supportive clinical management). One hospitalized patient died later, probably from medical complications of AN.

At the end of the study, 9% of the women had a very good outcome and 21% more had improved considerably; 70% made only small gains or no gains. The surprise for the researchers was that contrary to their hypothesis, patients who received nonspecific supportive clinical management had an outcome as good or better than the outcomes of those who received specialized psychotherapy. Interpersonal psychotherapy was the least effective of the three approaches. Possible explanations for this include the relative lack of focus on symptoms, the relatively long time taken to decide on the problem area,

which reduced the middle phase of interpersonal psychotherapy, and the lack of reactivity of the symptoms of AN. Possible reasons that CBT wasn't more effective included the large amount of psychoeducational material and extensive skills that had to be acquired, inability to generate alternatives to fixed cognitions stemming from the egosyntonic nature of AN, which made it difficult to work toward change.

According to the authors, nonspecific supportive clinical management may be a particularly effective treatment for acute AN. Its effectiveness may have been due to the fact that clinicians experienced with treating eating disorders followed a detailed treatment manual, and included a detailed discussion of ways to increase food choices in quantities in order to gain weight. The remaining session content was based on issues the patient chose to present, which may have given patients a sense of autonomy and control, improving the therapeutic alliance, empathy, positive regard, and support for this patient group.

Bacterial Infections: Hard to Detect Among AN Patients

Fever and immune responses help patients recover from infectious disease. Recovery seems to be aided by an array of innate and adaptive immune responses and the suppression of viral and bacterial growth by body temperatures above the optimal temperature range of the infectious organism. However, bacterial infections may be overlooked in patients with anorexia nervosa because of the lack of a common marker—fever.

A team of Australian and Canadian researchers examined the charts of 311 consecutive hospital admissions of AN patients and compared these to patients with bacterial infections in the hospital (*Int J Eat Disord* 2005;37:261).

Lack of fever among the AN patients was one reason the bacterial infections were not diagnosed sooner. Because it

took longer to detect the infections, the complications from bacterial infection were greater among the AN patients than among those patients without AN who were hospitalized with bacterial infections.

Dr. Rhonda F. Brown and colleagues reviewed the medical records of 311 consecutive AN patients admitted to Royal Prince Alfred Hospital, Sydney, Australia, from January 1, 1992 to December 31, 2002. Detailed temperature data were collected for all cases of infection, from the onset of the bacterial infection until discharge from the hospital. Each case was matched to a general medical admission patient who had a bacterial infection; the two groups were matched by age, gender, site of infection, and when specified, the infective organism.

Most AN patients had serious infections

Twenty-three AN patients had documented bacterial infections. Of these 23 cases, 16 presented with serious infections: 5 with pneumonia, 5 with urinary tract infections, 3 with cellulitis, 2 with foot infections, and 1 with inflamed tonsils. All but 5 patients had body temperatures lower than 98.6° F, and some had temperatures as low as 95.5° F.

None of the patients died during hospitalization, but the course of infection was complex in some. For example, 2 patients had two infections at admission—1 had both pneumonia and a urinary tract infection, and 1 had pneumonia followed by an infected central line. There was also a high rate of comorbid disease. AN patients with infections often were dehydrated and had a range of metabolic disorders, including hypokalemia, hyponatremia, and hypoglycemia. Other common diagnoses were osteopenia/osteoporosis, anemia or depression. Low serum calcium, iron, magnesium, phosphate or zinc levels were also reported.

To complicate matters even more, some patients presented with occult disease or symptoms that were difficult to diagnose on admission. For example, 2 patients were admitted with unexplained weight loss, delirium, and weakness and 1 with unexplained edema, rapid weight increase and hy-

poproteinemia.

AN patients who did have a fever had more serious bacterial infections, although most patients with serious bacterial infections did not have fever. Approximately one-third of the patients were unconscious or collapsed on admission. Patients who were admitted with bacterial infections had serious disease. They were more likely to develop complications such as renal failure, and to be readmitted for treatment of infection than non-anorectic control patients with infections, and AN patients had longer hospital stays marked by more serious complications.

A need for special attention and testing

Currently there are no recommendations for special prophylaxis, monitoring, early treatment, or special treatment of bacterial infections in AN patients. The authors recommend that clinicians be alert to the possibility of hidden bacterial infections among AN patients and that an early complete

Stealth Project Tracks the Effects of Pro-Anorexia Websites

The emergence of websites solely designed to promote anorexia nervosa has been a troubling trend. These websites, which have flourished on the Internet, take a positive and encouraging attitude toward restricting food and achieving an ultra-thin body.

Anna M. Bardone-Cone, PhD and Kamila M. O'Neil, MA, at the University of Missouri-Columbia, borrowed many elements from the 300-plus pro-anorexia websites they studied and devised their own "pro-anorexia" test website. They included features common to nearly all of the pro-anorexia websites, such as photo galleries of extremely thin and even emaciated women, including digitally manipulated pictures of models to make them look skeletal.

They also included the central beliefs (Ana Creed), and rules (Thin Commandments) of those who ascribe to the pro-ana message. The website provided information about self-induced vomiting and ways to restrict food for faster weight loss. The website also offered

Medical Management of Eating Disorders

(By C. Laird Birmingham and Pierre Beumont. Cambridge University Press. 289 pages, including 10 color plates, \$55)

Before he died in late 2003, Dr. Beumont, the late and exceptionally distinguished Chairman of Psychiatry at the University of Sydney, was the driving force behind the successful completion and publication of the Australian and New Zealand clinical practice guidelines for the treatment of anorexia nervosa (*Aust N Z J Psychiatry* 2004; 38: 659).

In this welcome volume, Professor C. Laird Birmingham, an internist at the University of British Columbia, and Dr. Beumont expand on much of the excellent work that appeared more briefly in the guidelines, and offer a comprehensive approach to the medical assessment and treatment of eating disorders. Combining lifetimes of clinical experience at different centers, treating the most difficult and intractable patients with anorexia nervosa, and extensive scholarship, this book's focus on detailed medical management protocols will be particularly useful to those in inpatient and residential settings. Reading like a clearly written standard medical textbook, full of useful tables considering differential diagnoses of various symptoms and complications, lists of tests to order, and specific treatment algorithms, this volume offers more detail on a range of medical problems than anything I've previously seen.

For assessment, included are suggested schema for taking medical histories and conducting physical examinations; thorough considerations of diagnostic laboratory testing, including limitations and dangers of various tests; and detailed system-by-system reviews of complications affecting various organ systems. These include nursing implications as well as instructions for what patients should report to their physicians. All major organ systems are well covered. The dermatological discussion is the most complete I've seen in a text.

The sections on medical and nutritional therapy alone are worth the price of the book. Included are algorithms for distinguishing urgent from non-urgent conditions; a laxative-withdrawal protocol; suggested inpatient orders; a suggested protocol for preventing refeeding syndrome; and options for magnesium supplementation. Nasogastric feeding is briefly addressed.

Special problems considered include involuntary patients, geriatric patients, diabetics, and children and adolescents. Brief cases illustrate clinical problems requiring attention. Sections on how psychiatric problems with which these patients and families struggle interface with the medical problems and round out this book. Of special note, brief chapters addressed to primary care physicians, nurses, dietitians, family and friends add to the book's appeal and value.

I'd say that anyone treating serious cases of anorexia nervosa will want to have a copy of this book close by.

—J.Y.

a forum with chat rooms advocating group dieting and fasting.

Once the website was up and operating, the authors randomly assigned 24 young women to view one of three websites they had created: the prototypical pro-anorexia website just described, a website about female fashion using average-sized models, or an appearance-neutral website about home décor. The participants completed a set of questionnaires assessing mood and cognitions before and after viewing their particular website, and completed measures of expected outcomes related to eating disordered behaviors after viewing the websites.

The impact of the websites

As the authors had suspected, the women who viewed the pro-anorexia website reported decreases in self-esteem, confidence about their appearance and perceived attractiveness. They had increases in negative affect, perception of being overweight, and were more inclined to diet and think about their weight and shape. This pattern was not found among the other two groups.

The authors concluded that their preliminary data suggest that viewing pro-anorexia websites had negative affective, cognitive, and behavioral effects on women. The Missouri researchers reported the preliminary findings at the International Eating Disorders meeting in Montreal at the end of April.

Low-Dose Testosterone May Be Helpful in Severe AN Cases

Low doses of testosterone may be beneficial for women with severe cases of anorexia nervosa (AN), according to researchers at Massachusetts General Hospital and Harvard Medical School, Boston (*J Clin Endocrinol Metab* 2005;1428). This small controlled study showed low doses of testosterone were effective for treating severe bone loss and for improving depression in AN patients.

Previous studies have demonstrated that bone formation increases in postmenopausal women receiving testosterone plus estrogen, compared to women receiving supplemental estrogen alone. The authors believe their study is the first to test the effects of testosterone, without estrogen supplementation, on bone formation.

The patient group included 33 women with AN and relative testosterone deficiency, who were randomized to receive transdermal testosterone (Intrinsa®), in dosages of 150 mcg or 300 mcg/day, or placebo, for 3 weeks. Serum testosterone levels were then measured by column chromatography. At baseline, there were no differences between patients who received placebo and those who were given testosterone in age, weight, body mass index, percent of ideal body weight, duration of amenorrhea, free or total testosterone markers of bone metabolism, bone density, severity of depression, or special cognition.

After three weeks, serum total and free testosterone levels increased significantly in the patients who had the testosterone patches. About half of the patients randomized to receive 150 mcg/day and 67% of those who received 300 mcg/day of testosterone experienced an increase in free testosterone to levels that were higher than those reported as the upper limit of the normal premenopausal woman. Estradiol, serum hormone-binding globulin, dehydroepiandrosterone sulfate, and IGF-1 did not change. Lower-weight patients who received testosterone had a smaller increase in serum free testosterone than did higher-weight subjects. Weight did not change during the three-week study

in any of the three groups.

Bone changes

Levels of the bone marker C-terminal propeptide of type 1 collagen (PICP) were higher during testosterone administration than with placebo. Changes in PICP correlated with changes in free testosterone over 3 weeks. Other bone markers, serum osteocalcin, bone-specific alkaline phosphatase and serum N-telopeptide levels, did not change significantly over the 3 weeks of treatment in the group receiving testosterone, compared with placebo.

Improved mood and spatial orientation

Depressed patients receiving testosterone had improved mood, compared with patients receiving the placebo. The mean Beck Depression Inventory score at baseline improved from the severely depressed range into the moderately depressed range after 3 weeks of testosterone. There was no change in use of antidepressants among any of the patients during the 3-week trial. After 3 weeks, those treated with testosterone also did better on the Mental Rotations Test than did those receiving placebo. This test evaluates a person's ability to judge spatial changes in rotated figures.

Side effects

The testosterone patches were generally well tolerated. Three subjects in the testosterone groups and one in the placebo group developed mild skin irritation at the patch site, but they chose not to drop out of the study. There was no increase in hirsutism. One subject randomized to the testosterone treatment, who had a history of affective disorder, reported increased depression and anxiety after 10 days of treatment; this improved when a benzodiazepine was given. Others reported episodes of mild fatigue and vertigo.

Limits of the study

The authors did point out several limitations of their study. First, it involved a small group followed for only

3 weeks. Also, because only one of three bone formation markers responded during the study, they feel that further studies are needed to determine

Family Meals: One Deterrent to Disordered Eating?

Regular, structured and harmonious family meals with all family members present may play a role in preventing unhealthy weight-control behaviors among teens, according to the results of a recent study (*J Adolesc Health* 2004; 35:350).

Many factors can contribute to unhealthy weight-control practices and other disordered eating patterns among teenagers, according to Dr. Dianne Neumark-Sztainer and colleagues at the University of Minnesota, Minneapolis. These include societal pressures to be thin, parents' attitudes toward weight, family relationships, peer dieting practices, and perceptions of body image. However, the structure and atmosphere of meals at home are important as well, according to the researchers.

After surveying 4,476 ethnically diverse adolescents from public middle and senior high schools participating in the Project EAT (Eating Among Teens) study, and gathering anthropometric data as well, the Minnesota researchers found several patterns of disordered eating related to family meals. Adolescent girls who reported more frequent family meals, high priority of family meals, a positive atmosphere at meals, and more structured meals had less risk for engaging in unhealthy weight control behaviors and chronic dieting. The atmosphere at family meals was also inversely related with binge eating. Girls who ate three to four family meals per week had approximately one-third the risk of extreme weight control practices compared to girls who did not eat any family meals in the past week.

Among teenage boys, the frequency of family meals and all measures of the environment of family meals were inversely associated with extreme weight-control behaviors. The priority given to family meals and the atmosphere of the meals were inversely associated with less extreme unhealthy weight-control

behaviors. Any association with binge eating was inconsistent.

Family meal patterns were inversely associated with chronic dieting among the girls but not among the boys. Gender differences may have been a factor, owing to increased sensitivity of girls to family nuances, differential interpretation of the term “dieting” used in this study, and or/lower frequencies of boys reporting chronic dieting than girls, according to the authors.

Binge eating

The patterns of association between family meals were somewhat different for binge eating. Among girls, the strongest correlate of binge eating was the atmosphere at family meals (this factor did not, however, remain statistically significant after taking into account overall family connectedness). The findings suggest that girls may respond to a negative familial environment through binge eating. Alternatively, girls who are already binge eating may perceive the family environment as more negative. The same pattern was not reported among boys.

Clinical applications

Findings from this study suggest that family meals have an important part to play in preventing unhealthy weight-control behaviors among teenagers. The authors suggest that healthcare providers working with youth and their parents take the time to discuss family meal patterns and explore realistic, real-world strategies for improving the

BED and Obesity Lessen Quality of Life

Binge eating disorder, or BED, is marked by recurrent episodes of binge eating without the extreme measures of bulimia nervosa, such as purging, to prevent weight gain. Thus, it isn't surprising that obesity is much more common among persons with BED (65%) than among those with bulimia nervosa (33.5%).

Elizabeth Rieger, PhD, and colleagues found that obese individuals with BED had greater impairment in work, public distress, sexual life, and self-esteem than

obese persons without a diagnosis of BED. Thus, they had an overall poorer quality of life (*Int J Eat Disord* 2005; 37:234).

Defining ‘quality of life’

As the authors point out, quality of life refers to an individual's overall satisfaction with life. It includes a broad range of elements, including the person's physical, emotional, social, sexual, and occupational functioning.

Two samples of obese individuals seeking treatment were recruited for the study. Those with BED consisted of individuals from San Diego and Minneapolis who were enrolled in a multisite, randomized, controlled treatment trial assessing the effectiveness of a weight loss medication in the treatment of BED. The non-BED sample included adults from San Diego who were taking part in a randomized, controlled treatment trial intervention testing the effectiveness of various psychological interventions for maintenance of weight loss in children and their parents. In both groups participants had to have a body mass index of at least 30 kg/m².

The two groups were given various questionnaires, including the Eating Disorder Examination (EDE, 12th Ed.), the Eating Disorder Examination-Questionnaire, the Primary Care Evaluation of Mental Disorders, and the Impact of Weight on the Quality of Life Questionnaire (IWQOL). The IWQOL-Lite is a shorter version of the IWQOL that includes a 31-item, self-report questionnaire that assesses the effect of being overweight on five domains of quality of life, including work, public distress, sexual life, physical function, and self-esteem. For example, it includes choices such as “Because of my weight I don't get appropriate raises, promotion or recognition at work.”

Results

As the authors had suspected, obese persons with BED had greater impairment in the psychosocial domains of work, public distress, sexual life, and self-esteem. Because the BED and non-BED groups were comparable in terms of BMI, the poorer psychosocial functioning of persons with BED cannot be

attributed to elevated obesity among the BED participants. Thus, although research consistently shows that obesity is associated with losses in physical functioning, the current results suggest that BED among obese individuals leads to even greater impairment in terms of decreased psychosocial functioning. Thus, for obese individuals with BED, their quality of life has pervasive deficiencies that affect both the physical and psychosocial functioning.

Some implications of the study

The authors feel their findings have several implications. The pervasive impairment in quality of life among obese persons with BED suggests that this factor should be routinely assessed in treatment outcome research on persons with BED. Finding that BED is associated with losses in quality of life beyond those already resulting from obesity provides additional support for recognizing the severity and distinctiveness of the disorder, according to

Does Early Dieting Increase the Risk of Obesity and Eating Disorders?

According to Diane Neumark-Sztainer, PhD, MPH, RD, and her colleagues at the University of Minnesota, dieting early in life places youth at risk for eating disorders, disordered eating patterns, and obesity as they reach adulthood (*J Adolesc Health* 2005; 36:152).

An ethnically and socioeconomically diverse sampling of middle school and high school students, Project EAT was originally conducted in 1998-1999. The authors' analysis focused on 1,729 older adolescents who were followed from high school to young adulthood.

Preliminary analyses show that 24% of the females and males were overweight or at risk for becoming overweight (body mass index > than the 85th percentile), using self-reported height and weight data. Binge eating was reported by nearly 16% of the females and 4.6% of the males. Extreme weight control behaviors, including

continued on page 8

QUESTIONS & ANSWERS

An Anti-Obesity Drug for Younger Patients?

Q Are any anti-obesity drugs currently being prescribed for teens? (A.Z., Key West, FL)

Antiobesity drug therapy is widely accepted for adults, but few agents are approved for this use. Sibutramine is among the few agents currently approved for treating obesity among adults. Recently a team of Brazilian researchers designed a randomized controlled trial of sibutramine among obese adolescents (*J Clin Endocrinol Metabol* 2005; 90:1460). The researchers wanted to determine if this drug, plus diet and exercise, was safe, tolerable, and effective for obese adolescents when given in a clinical setting. The authors used a single-blind, four-week, placebo run-in period followed by a 6-month, randomized, double-blind, placebo-controlled period. Sixty boys and girls aged 14 to 17 years who had body mass indexes (BMIs) ranging from 30 to 45 and who were otherwise healthy joined the study. During the first month, all patients received placebo and a low-calorie diet plus moderate aerobic exercise. Then, for the next 6 months, participants received either sibutramine or placebo. During the study, blood tests and echocardiograms were performed.

Of the 60 obese adolescents who completed the run-in period and were randomized to sibutramine or placebo, 10 withdrew from the study (8 in the placebo group and 2 in the sibutramine group). Those in the placebo group withdrew due to nonadherence to the

protocol or to loss of follow-up, withdrawal of consent, and pregnancy. No one in either group withdrew due to adverse effects.

Participants in the sibutramine group lost an average of 10.3 kg, and those in the placebo group lost an average of 2.4 kg. Mean BMI reduction was also significantly greater in the sibutramine group than in the placebo group (3.6 vs. 0.9 kg/m²). More than five times as many adolescents assigned to the sibutramine group (14) than those in the placebo group lost at least 10% of their initial weight. Approximately 25% of adolescents assigned to the sibutramine group (7 teens) reduced their initial weight by at least 15% compared with teens in the placebo group.

Constipation was the only adverse effect that was significantly increased in those receiving sibutramine treatment. Because damaging heart valves and development of other cardiac abnormalities have been concerns with anti-obesity drugs, the researchers performed echocardiographic studies to evaluate the drug's safety. No changes were noted; regurgitation was found in a few patients at baseline and after treatment was found to be a pre-exist-

DIETING continued from page 7

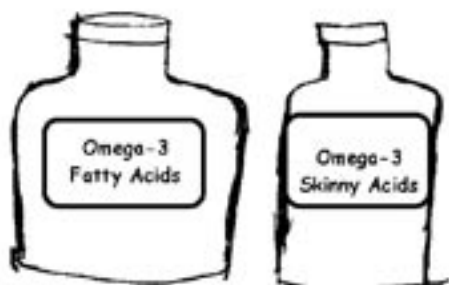
laxatives, vomiting, diet pills and diuretics were reported by 24.3% of females and 6.6% of males. Diagnosis of an eating disorder in the past year was reported by 5.7% of females and 0.5% of males.

The effect was greater among females

Initial analyses also show that early dieting was significantly associated with

becoming overweight in young adulthood and the later onset of binge eating. Among females, early dieting was associated with the onset of extreme weight control behavior in females and had a borderline significance among males. Early dieting was also associated with eating disorders in the past year among females. Among males, associations with early dieting were not significant.

Nibbles by Hunter



IN THE NEXT ISSUE

Attachment to Life Among Anorexia Nervosa Patients

By Yael Latzer, MD
Director, Eating Disorders Clinic, Rambam Medical Center, Haifa, Israel

Dr. Latzer's group has found that the higher the tendency of eating disorders patients to ignore their needs and serve other's needs (high selflessness scores), the higher their tendency to be attracted to death and to be less attracted to life. Clinicians can take positive steps to intercede by helping patients reduce their guilt.

PLUS

- *More Highlights from the International Conference on Eating Disorders*
- *Inpatient Care and Insurance Coverage*
- *Study Sheds Light on Crossover Patterns*
- *Screening for Eating Disorders in High School: Is It Helpful?*

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Continuing Education Quiz for
Eating Disorders Review

May/June 2005 - Volume 16/Number 3

You are eligible to receive one (1) Continuing Education (CE) credit by completing this quiz based on this issue of *Eating Disorders Review* (80% correct for a pass). **INSTRUCTIONS:** Circle the best answer to each of the following questions and return the completed test with a check for \$25 (payable to PER) to PER at **PO Box 2196, Keystone Heights, FL 32656**.

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Your CE credits will be documented and you will be sent a letter and/or certificate of completion. CE credits can be used in support of your license renewal, to maintain your managed care board memberships, to obtain discounts on your professional liability insurance policy, and to document your commitment to ongoing professional development. Completing this program should increase your knowledge regarding recent research developments concerning eating disorders and enhance your clinical knowledge regarding disordered eating.

1. Compared to a wait list control group, participants in an online intervention program concerning weight and body perceptions showed lower levels of which of the following behaviors at a one-year follow-up?

- a. self-reported vomiting
- b. diuretic use
- c. driven exercise
- d. all of the above

2. One behavior that was relatively HIGHER at the one-year follow-up within the online treatment group described above was

- a. social isolation
- b. use of laxatives
- c. compulsive exercise
- d. self-induced vomiting

3. According to Dr. Kelly Bownell, 25% of all vegetables consumed in the U.S. each year are

- a. tomatoes
- b. mashed potatoes
- c. canned
- d. french fries

4. In a study of rural patients in North Dakota and Minnesota, researchers found that, compared to participants assigned to a traveling therapist, those that took part in a telemedicine-based CBT program

- a. were much better off in general across a range of relevant variables
- b. actually showed significantly poorer outcomes along most, though not all, indicators of improvement
- c. fared largely the same
- d. had significantly greater drop out rates

(continued on other side)

5. In an Internet-based study of self-help for bulimia conducted through the University of Barcelona, after patients completed the self-help guide

- a. the frequency of purging was reduced among 83% of the patients
- b. the frequency of binge-eating actually increased, probably as a function of concentrating on it
- c. approximately 70% of patients improved, but nearly 20% developed anorexia
- d. none of the above

6. In a study of 35 women who completed therapy for anorexia, Dr. McIntosh found, contrary to her predictions, that

- a. virtually no one in any of the three treatment groups showed significant gains
- b. patients who received nonspecific clinical management had outcomes comparable to or better than those who received specialized psychotherapy
- c. recovery rates were strikingly favorable, and equally positive for CBT and Interpersonal Therapy, though not for nonspecific clinical management group
- d. none of the above

7. According to a team of Australian and Canadian researchers, one reason that bacterial infections were not discovered sooner in anorexic patients is that they

- a. didn't have a fever
- b. refused bacteriological screening
- c. could not afford to have their blood drawn because they were too weak and anemic
- d. none of the above

8. According to work by Anna Bardone-Cone and Kamila O'Neil at the University of Missouri-Columbia, women who viewed pro-anorexia websites experienced

- a. increases in negative affect
- b. decreases in self-esteem
- c. greater inclination to diet
- d. all of the above

9. True or False: Low doses of testosterone may be beneficial for women with severe cases of anorexia nervosa.

- a. True
- b. False

10. True or False: Regular, structured, and harmonious family meals may play a role in preventing unhealthy weight-control behaviors among teens.

- a. True
- b. False

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Evaluation: Overall, this issue of *Eating Disorders Review*: (circle appropriate response)

Provided informative updates	5	4	3	2	1	Was not informative
Expanded my knowledge	5	4	3	2	1	Did not expand my knowledge
Provided useful resources	5	4	3	2	1	Did not provide useful resources