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Behav Modif 2004; 28; 763
DOI: 10.1177/0145445503259851

The online version of this article can be found at:
http://bmo.sagepub.com/cgi/content/abstract/28/6/763
Assessment of Eating Disorders

Review and Recommendations for Clinical Use

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Practitioners have come under increasing pressure to provide objective data on assessment and treatment outcome of clients. This article provides a brief summary of assessment of eating disorders for the practicing clinician, with an emphasis on well-validated assessment instruments. The critical domains that should be covered in a thorough assessment of eating disorders are reviewed, as are some shortcomings in the current assessment literature, and also discussed is which assessment instruments for the eating disorders are most useful in a clinical context. Using well-validated, standardized assessment instruments in all phases of the treatment process is a critical part of justifying a treatment plan and providing objective data on client progress and outcome.

Keywords: assessment; anorexia; bulimia; clinical; review

Practitioners have come under increasing pressure to provide objective data on assessment and treatment outcome of clients. This article will provide a brief and hopefully useful summary of assessment of eating disorders for the practicing clinician, with an emphasis on well-validated assessment instruments. We first review the domains that should be covered in a thorough assessment of eating disorders in clinical practice, focusing on anorexia nervosa (AN) and bulimia nervosa (BN). We then examine which assessment instruments are actually used regularly in the treatment outcome literature. Finally, we discuss some shortcomings in the current assessment literature and some particularly useful assessment instruments for the eating disorders in a clinical context.
DOMAINS OF INTEREST IN THE EATING DISORDERS

Knowing what domains to assess is an integral part of the assessment process. Although eating disorders are often associated with secondary psychopathology, and assessing this pathology is important for treatment planning, in this section we limit our review to the central domains of the eating disorders themselves. For a thorough discussion of secondary psychopathology associated with eating disorders, see Williamson (1990).

Several models have been proposed that identify the central symptoms associated with the eating disorders, including the Diagnostic and Statistical Manual of Mental Disorders (4th ed.) (DSM-IV-TR) diagnostic criteria (American Psychiatric Association, 1994), cognitive models of the disorders (Fairburn, 1997; Vitousek & Orimoto, 1993; Williamson, 1990), and models derived from factor analytic studies of symptom patterns (Byrne & McLean, 2002; Gleaves & Eberenz, 1993; Gleaves, Williamson, & Barker, 1993; Tobin, Johnson, Steinberg, Staats, & Dennis, 1991; Vanderheyden, Fekken, & Boland, 1988). Although there are some differences among these models, they have several symptom domains in common which appear to be central to the eating disorders.

BODY WEIGHT

Body weight is one of the primary features distinguishing persons with AN from persons with BN (DSM-IV). In AN, low weight is diagnostic and weight gain is the primary goal in the early stages of treatment. Conversely, patients with BN are typically normal-weight or slightly overweight (although they fear weight gain).

BINGE EATING AND COMPENSATORY BEHAVIOR

Binge eating and compensatory behavior such as vomiting are the most visible behavioral symptoms of the eating disorders. Although more closely identified with BN, binge eating and compensatory behavior are frequently seen in AN as well (DSM-IV), and reductions in these symptoms are primary treatment goals when they are present.
OVERCONCERN WITH SHAPE AND WEIGHT

An extreme concern with shape and weight, sometimes characterized as a fear of fatness or drive for thinness, appears to be central to both AN and BN. This overconcern is thought to drive much of the behavior seen in anorexia and bulimia (Fairburn, 1997; Holmgren et al., 1983; Vitousek & Orimoto, 1993), and a reduction in shape and weight concern is critical for treatment success (Fairburn, 1997; Fairburn, Marcus, & Wilson, 1993). Overconcern with shape and weight is tied closely to cultural norms concerning the body, which vary across time and culture (Heinberg, 1996). Therefore, clinicians should consider cultural factors when assessing weight and shape concerns.

DIETARY REstrtRAINT

Dietary restraint, conceptualized as the intent to limit caloric intake, whether or not the individual is actually successful (Lowe, 1993), plays a critical role in the eating disorders. In AN, successful caloric restriction leads to weight loss, which is the hallmark of the disorder. In BN, the relationship is more complex. Dietary restraint has been hypothesized to lead to binge eating through a variety of physiological and psychological mechanisms (Fairburn, 1997; Heatherton & Baumeister, 1991; Lowe, 1993; Polivy & Herman, 1993; Vitousek & Orimoto, 1993), and a decrease in dietary restraint is thought to be the central mechanism underlying cognitive-behavioral treatment of bulimia (Craighead & Agras, 1991). Although not all researchers have found a direct relationship between restraint and binge eating (e.g., Byrne & McLean, 2002), reductions in dietary restraint are critical to successful treatment of AN and BN.

BODY IMAGE DISTURBANCE

There is some disagreement about the exact nature of the concept of body image disturbance (e.g., Cash & Deagle, 1997; Thompson, Altabe, Johnson, & Stormer, 1994) and how to assess it (Cash & Deagle, 1997; Thompson, 1995). In particular, researchers have distinguished between attitudinal (i.e., dissatisfaction with one’s body or
body parts) and perceptual (i.e., inability to accurately gauge body size) aspects of body image (Cash & Deagle, 1997). However, most models of the eating disorders consider some aspect of body image disturbance to be central to the eating disorders, and several studies have shown that body image concerns are important in the development and treatment of eating disorders (Kearney-Cooke & Striegel-Moore, 1997; Rosen, 1996, 1997). Treatment of body image concerns are often underemphasized in eating disorder treatment programs (Rosen, 1997), but improvements in body image are essential for successful treatment of AN and BN. Because attitudinal components of body image appear to be more relevant for clinical practice (Cash & Deagle, 1997), the present review will concentrate on this aspect of body image.

AFFECTIVE DISTURBANCE

Negative affect, especially depression, often develops as a consequence of eating pathology (P. J. Cooper & Fairburn, 1986). In fact, eating disorders and affective disorders co-occur to such a degree (Troop, Serpell, & Treasure, 2001) that some researchers in the 1980s hypothesized that bulimia was merely a subtype of depression (P. J. Cooper & Fairburn, 1986; Hinz & Williamson, 1987; Levy, Dixon, & Stern, 1989). Although this theory has not received empirical support, negative affect (especially depression) remains a major area of concern in the eating disorders. Depression does not merely co-occur with eating disorders, however; depression exacerbates the eating disorders and can interfere with treatment, and greater pretreatment levels of depression have been found to predict greater posttreatment eating disorder psychopathology and body dissatisfaction (Bossert, Schmölz, Wiegand, Junker, & Krieg, 1992).

SHORTCOMINGS IN THE ASSESSMENT OF EATING DISORDERS

The clinical assessment of eating disorders can be problematic. Although detailed critiques of the assessment literature can be found elsewhere (e.g., Anderson & Maloney, 2001), this article reviews one
of the more critical shortcomings in the eating disorders field that is important for practitioners.

ASSESSING CRITICAL DOMAINS OF THE EATING DISORDERS

As mentioned above, researchers have delineated a number of domains that are critical to the development and maintenance of eating disorders. However, outcome studies do not assess these areas equally well. For example, in a recent review, Anderson and Maloney (2001) found that although most controlled treatment outcome studies of cognitive-behavioral therapy (CBT) for BN provided data on binge eating, purgative behavior, and concern for shape and weight, relatively few provided data on restraint and self-esteem. In fact, only 19% of the studies reviewed provided outcome data on all five of the components of this model. This is problematic because restraint and self-esteem are essential components of the CBT model of BN (Byrne & McLean, 2002; Fairburn, 1997). Similarly, in a review of the literature, Rosen (1996) found that only one third of studies of CBT for BN assessed body image disturbance, another key component of the eating disorders. Because of these gaps in assessment, we have corresponding gaps in our knowledge of the effectiveness of treatment of the eating disorders. Anderson and Maloney (2001) provide some recommendations to improve these shortcomings, including using more assessment instruments and measuring both cognitive restraint and caloric restriction when assessing dietary restraint. These recommendations apply for those in clinical practice as well; to thoroughly assess client outcome, practitioners should be sure to assess all of the core domains of the eating disorders discussed above.

The binge eating dilemma. The assessment of binge eating is a particularly problematic topic in the eating disorders literature. First, there is disagreement about the definition of the term “binge.” According to the DSM-IV-TR, a binge episode must involve eating an amount of food that is definitely larger than most people would consider normal under the circumstances and be accompanied by a sense of lack of control over eating during the episode. A binge episode that fully meets DSM-IV-TR criteria has also been called an objective
bulimic episode (OBE; Fairburn & Cooper, 1993). However, laypersons, including those who binge eat, rely more on feelings of loss of control and violation of dietary standards rather than the amount of food eaten to define an eating episode as binge (Beglin & Fairburn, 1992; Johnson, Boutelle, Torgrud, Davig, & Turner, 2000; Telch, Pratt, & Niego, 1998). Any self-reported binge episode that does not fully meet DSM-IV-TR criteria has been termed a subjective bulimic episode (SBE; Fairburn & Cooper, 1993).

This distinction has practical implications in diagnosis and evaluation of treatment outcome. Self-report questionnaires typically ask simply how often the respondent engages in “binge eating.” If the respondent reports all binge episodes (both SBEs and OBEs) as “binge,” this may result in an overestimation of true binge frequency. Similarly, even if the clinician obtains detailed reports of “binge episodes” via interview or food records, they are still dependent on clients’ providing accurate reports of food intake. However, large errors in food estimation, particularly overestimation, are extremely common (Anderson, Williamson, Johnson, & Grieve, 1999; Hadigan, LaChaussee, Walsh, & Kissileff, 1992; Schoeller, 1995). If individuals overestimate when reporting food intake, then they may overestimate the number of their OBEs by reporting their intake appear as larger than it actually is.

This issue is further complicated by studies that suggest that the current DSM-IV-TR requirement that a binge consists of a large amount of food is unnecessary (Niego, Pratt, & Agras, 1997; Pratt, Niego, & Agras, 1998). However, a recent study found that eliminating this diagnostic requirement had little effect on the base rate of BN (Thaw, Williamson, & Martin, 2001).

In sum, the assessment of binge eating remains one of the most difficult aspects of the assessment of eating disorders. This is particularly troubling because binge eating is one of the essential aspects of the eating disorders. Some of the difficulty lies in the definition of a binge episode itself; the definition and essential components of a binge episode are still unclear. The measurement of binge eating is also problematic, however, because it is extremely difficult to obtain an accurate estimation of food intake. The use of test meals may be useful in this context (see below).
RECOMMENDED MEASURES FOR
THE ASSESSMENT OF EATING DISORDER
SYMPTOMS IN CLINICAL CONTEXT

Although more comprehensive reviews of assessment instruments exist (Allison, 1995; Williamson, 1990), the following instruments were chosen as some of the most effective and well-validated in the eating disorders literature that are also practical for use in clinical practice.

SCREENING MEASURES

When screening for the presence of eating disorders, it is not necessary to determine an exact diagnosis or obtain detailed patterns of problematic symptoms. Rather, the purpose of screening is to identify individuals who are likely to have significant levels of eating pathology and need further assessment. Screening measures are usually brief, self-report inventories with a simple cutoff score to indicate clinical levels of psychopathology. The most useful and psychometrically sound instruments are reviewed below.

Eating Attitudes Test (EAT). The EAT (Garner & Garfinkel, 1979) is a 40-item self-report inventory originally designed to measure symptoms of AN. A modified version, the EAT-26, was developed after factor analysis found 14 items of the original EAT unnecessary (Garner, Olmstead, Bohr, & Garfinkel, 1982). The EAT and EAT-26 are highly correlated ($r = .98$) (Garner et al., 1982).

Test-retest reliability (Carter & Moss, 1984) and internal consistency (Garner & Garfinkel, 1979) of the EAT are good, and it has been shown to have good concurrent validity with a number of other eating disorder measures (Williamson, Anderson, Jackman, & Jackson, 1995).

Although the EAT was designed to identify individuals with AN-like symptoms, it is best conceptualized as a measure of general eating disorder pathology. Although it cannot yield a specific eating disorder diagnosis (Garner, 1997), the EAT has been found to have good discriminant validity. It can differentiate persons with AN, BN, and
binge eating disorder (BED) from controls and persons with AN and BN from those with BED, although it cannot differentiate persons with AN from those with BN (Williamson, Prather, McKenzie, & Blouin, 1990). Norms are available for individuals diagnosed with AN, BN, and BED, as well as obese controls, female controls, and male controls (Williamson et al., 1995). Cutoff scores of 30 on the EAT and 20 on the EAT-26 have been suggested to identify persons with problematic attitudes and behavior toward eating (Garner et al., 1982).

The EAT and EAT-26 are simple to administer and score and relatively quick to complete, which is perhaps why they are the most commonly used self-report inventories in eating disorder treatment studies (Williamson, Anderson, & Gleaves, 1996). In a clinical context, they may be used as screening measures to identify those clients likely to have significant eating concerns. They may also be given repeatedly throughout treatment as global measures of treatment progress (Garner, 1997).

**Bulimia Test–Revised (BULIT-R).** The BULIT-R (Thelen, Farmer, Wonderlich, & Smith, 1991) is a 28-item questionnaire designed to measure the DSM-III-R symptoms of BN (American Psychiatric Association, 1987).

Although most psychometric research has been conducted on an earlier form of the BULIT-R (BULIT; Smith & Thelen, 1984), the BULIT and BULIT-R are highly correlated \( r = .99 \) (Thelen et al., 1991). The BULIT has been found to be reliable, there is evidence for its validity (Thelen et al., 1991; Williamson et al., 1995) and it can discriminate individuals with BN from those with AN and controls (Thelen et al., 1991; Welch, Thompson, & Hall, 1993). A cutoff of 104 was originally recommended to differentiate individuals with BN from controls, although lower cutoff scores can be used to minimize false negatives (Thelen et al., 1991; Welch et al., 1993).

In sum, the BULIT-R is a brief, easy to score, well-validated measure of the symptoms of bulimia. In clinical practice, it can be extremely useful as a screening measure for persons suspected of BN, and it can be used to track progress throughout treatment as well.
DIAGNOSTIC MEASURES

Because it allows for more detailed questioning, the clinical interview remains the assessment tool of choice when diagnosing the eating disorders. Two semistructured interviews are reviewed below. For those wanting to use a less structured interview format, Crowther and Sherwood (1997) provide detailed suggestions for diagnostic interviewing.

Eating Disorder Examination (EDE). The EDE (Z. Cooper & Fairburn, 1987; Fairburn & Cooper, 1993), currently in its 12th edition, is a semistructured interview designed to assess psychopathology associated with AN and BN. The 12th edition assesses two behavioral indices, overeating and methods of extreme weight control, as well as four subscales (restraint, eating concern, shape concern, and weight concern). The EDE is an investigator-based interview, in which the interviewer, not the participant, rates the severity of symptoms. This is particularly important in rating episodes of binge eating, because the term “binge” appears to be defined differently by laypersons and professionals (see above).

Interrater reliability for individual items and the subscales is good (Z. Cooper & Fairburn, 1987; Wilson & Smith, 1989), as is test-retest reliability (Rizvi, Peterson, Crow, & Agras, 2000) and internal consistency (Z. Cooper, Cooper, & Fairburn, 1989). The EDE has been shown to discriminate between individuals with eating disorders and controls (Z. Cooper et al., 1989) as well as between persons with BN and restrained eaters (Rosen, Vara, Wendt, & Leitenberg, 1990; Wilson & Smith, 1989).

Because of the EDE’s strong psychometric properties and its investigator-based format, it has been called the “method of choice” for assessing the specific psychopathology of the eating disorders (Fairburn & Beglin, 1994) and is commonly used in treatment outcome studies. It assesses several of the central domains of interest in the eating disorders, including binge eating, purgative behavior, restraint, and body image concerns. However, it requires training and may take more than an hour to complete, which make it less suitable for some purposes (Wilson, 1993), such as screening or routine clini-
Moreover, studies have found discrepancies between the EDE and other measures on rates of binge eating, purgative behavior, and shape and weight concerns (see Anderson & Maloney, 2001, for a review). Despite these shortcomings, the EDE is strongly recommended as an assessment tool where the clinician has the time and resources to permit its use.

The Interview for the Diagnosis of Eating Disorders–IV (IDED-IV). The IDED-IV (Kutlesic, Williamson, Gleaves, Barbin, & Murphy-Eberenz, 1998) is a semistructured interview that was developed for the purpose of differential diagnosis using DSM-IV criteria, including AN and BN as well as BED and other subthreshold syndromes currently categorized under Eating Disorder Not Otherwise Specified (EDNOS).

The IDED-IV has good reliability and validity, and does discriminate between eating disorder diagnoses (Kutlesic et al., 1998). A particular strength of the IDED-IV is that patient responses are rated on severity scales that are related directly to current DSM-IV criteria. In each case, a score of 3 or above on a 1-5 scale is equal to the operational definition of that particular diagnostic symptom. Following the interview, the rater completes a diagnostic checklist using the severity ratings that leads directly to differential diagnosis according to DSM-IV criteria. Because it is very user-friendly and leads directly to diagnosis using current criteria, the IDED-IV is a viable alternative to the EDE in clinical practice.

MEASURES FOR TREATMENT PLANNING AND EVALUATION

There are a number of assessment instruments that may potentially be used in treatment planning and evaluation of the eating disorders, and the use of multiple measures for this purpose is the rule rather than the exception. The most important point to keep in mind in treatment planning and evaluation is to assess all core components of the eating disorders. The measures listed below are some of the best for assessing these core components most efficiently.

Self-monitoring. Self-monitoring of food intake is a useful method of obtaining information about eating behavior. Typically, informa-
Self-monitoring is an essential component of CBT for the eating disorders (Garner, Vitousek, & Pike, 1997; Wilson, Fairburn, & Agras, 1997) and can be used throughout treatment to monitor change in symptoms. Self-monitoring can provide a great deal of data, and self-reported binge/purge episodes are commonly collected in clinical practice. However, there is some controversy over the reliability and validity of self-reported binge/purge episodes and food intake. For example, Anderson and Maloney (2001) found that BN treatment studies that used self-monitoring as an outcome measure were less likely to show decreases in binge eating and purgative behavior following treatment than those that used the EDE, and one outcome study that used both methods found large discrepancies between self-report and the EDE (Walsh et al., 1997). As noted above, large errors in food estimation are also extremely common, and some individuals deliberately minimize or deny eating pathology on self-report forms (Crowther & Sherwood, 1997). A final concern with self-monitoring is that there is no standard format for self-monitoring; these procedures vary from professional to professional, which potentially limits their reliability. Despite these shortcomings, however, self-monitoring can be a useful tool in assessing dietary restraint, binge eating, and purgative behavior if viewed with appropriate caution and should be routinely collected during treatment.

**EDE.** The EDE (see the Diagnostic Measures section above for a thorough review) is also one of the best measures available for treatment planning and evaluation. It was developed, in part, for use as a measure of treatment outcome and it has been used widely in the eating disorder treatment literature. Although it has some disadvantages for use in clinical practice (see above), it can be an extremely useful tool for evaluating outcome if time and training permit its use.

**Multifactorial Assessment of Eating Disorder Symptoms (MAEDS).** The MAEDS (Anderson, Williamson, Duchmann, Gleaves, & Barbin, 1999) is a 56-item self-report measure designed to measure six symp-
tom clusters that may be directly manipulated in treatment and are thought to be important for treatment outcome of the eating disorders: depression, binge eating, purgative behavior, fear of fatness, restrictive eating, and avoidance of forbidden foods.

The test-retest reliability and internal consistency reliability of the MAEDS are good (Anderson, Williamson, Duchmann, et al., 1999), and a recent study of the criterion validity of the MAEDS found that subscale score patterns matched well with the symptom profiles generated from a diagnostic interview (Martin, Williamson, & Thaw, 2000).

The MAEDS was designed specifically for use as a treatment outcome measure. It is brief and easy to administer, and its multifactorial design allows for a detailed analysis of symptom domains. Thus, changes in specific symptoms can be tracked throughout treatment. The MAEDS is a new measure and it has yet to be widely adopted in the literature, but it shows promise as a simple, easy to use outcome measure suitable for clinical practice.

**Eating Disorders Inventory–2 (EDI-2).** The EDI-2 (Garner, 1991) is a 91-item self-report measure that assesses symptom domains associated with AN and BN. The EDI-2 was developed from an earlier version of the measure (EDI; Garner, Olmstead, & Polivy, 1983), which had eight scales (Drive for Thinness, Bulimia, Body Dissatisfaction, Ineffectiveness, Perfectionism, Interpersonal Distrust, Interoceptive Awareness, and Maturity Fears); the EDI-2 kept the original eight scales and added three more (Asceticism, Impulse Regulation, and Social Insecurity).

Most of the psychometric information on the EDI was conducted using the original version of the EDI. Test-retest reliability of the original EDI subscales has been shown to be adequate (Crowther, Lilly, Crawford, & Shepard, 1992; Wear & Pratz, 1987). The internal consistency of the EDI-2 is higher for the original scales than for the new scales (Eberenz & Gleaves, 1994).

The EDI has been shown to discriminate between individuals with AN and controls (Garner et al., 1983) and BN and controls (Schoemaker, Verbraak, Breteler, & van der Staak, 1997), and EDI scores are associated with problematic eating behavior (Bourne, Bryant, Griffiths,
Touyz, & Beumont, 1998). Although the Drive for Thinness, Bulimia, and Body Dissatisfaction scales are most strongly correlated with eating-related pathology (Garner et al., 1983; Hurley, Palmer, & Stretch, 1990), scores on a number of the scales have been shown to improve with treatment (e.g., Bizeul, Sadowsky, & Rigaud, 2001; Thiel, Zueger, Jacoby, & Schuessler, 1998).

The EDI-2 is one of the most frequently used self-report assessment measures (Williamson et al., 1996) and it assesses many of the central domains of the eating disorders, including binge eating and purging and body image disturbance. Although the scales do not strictly adhere to DSM-IV-TR criteria for the eating disorders, it is relatively brief, is responsive to treatment, and assesses a number of the essential eating disorder domains.

Body Shape Questionnaire (BSQ). The BSQ is a 34-item self-report measure designed to assess negative feelings about one’s body size and shape (P. J. Cooper, Taylor, Cooper, & Fairburn, 1987). Higher scores are reflective of more body dysphoria, an aspect of body image disturbance; a score of 110 or above is indicative of clinically significant body dysphoria (P. J. Cooper et al., 1987). Although short forms of the measure have been developed (Evans & Dolan, 1993), including one specifically developed for use in an AN population (Dowson & Henderson, 2001), the original version remains most widely used in the literature. The BSQ has been shown to have good reliability and validity, and has been shown to discriminate between persons with BN and controls as well as persons in body image therapy and controls (P. J. Cooper et al., 1987; Rosen, Jones, Ramirez, & Waxman, 1996). Although other commonly used assessment measures also provide some information about weight and shape concerns (e.g., the EDE and EDI-2, see above), and related constructs such as fear of fatness (e.g., the MAEDS), the BSQ is a brief and easy-to-score instrument that can be used throughout the treatment process.

The Restraint Scale (RS) and the Three Factor Eating Questionnaire Cognitive Restraint Scale (TFEQ-R). The RS (Herman & Polivy, 1980) and the TFEQ-R (Stunkard & Messick, 1985) are perhaps the most widely used measures of dietary restraint in the litera-
ture. Although there has been some debate over the best way to measure dietary restraint via self-report (Gorman & Allison, 1995; Heatherton, Herman, Polivy, King, & McGree, 1988; Lowe, 1993), both the RS and TFEQ-R are brief self-report inventories with adequate psychometrics (Allison, Kalinsky, & Gorman, 1992; Gorman & Allison, 1995). The two instruments measure slightly different components of restraint; the RS measures the consequences of chronic unsuccessful dieting (Gorman & Allison, 1995; Heatherton et al., 1988; Laessle, Tuschl, Kotthaus, & Pirke, 1989b), whereas the TFEQ-R measures more successful caloric restriction, although individuals scoring high on this scale may not actually be in a hypocaloric state (Heatherton et al., 1988; Laessle, Tuschl, Kotthaus, & Pirke, 1989a, 1989b; Tuschl, Platte, Laessle, Stichler, & Pirke, 1990). Although other scales also measure some features of restraint (e.g., the EDE, EDI-2, and MAEDS), both the RS and TFEQ-R are brief alternatives to those other scales that can be used throughout treatment.

Test meals. Test meals are an often-overlooked tool for the assessment of eating disordered behavior (Andersen, 1995; Anderson & Maloney, 2001; Anderson, Williamson, Johnson, & Grieve, 2001). A test meal allows an assessor to obtain direct information on food consumption, which bypasses some of the problems inherent in self-report of eating. Test meals are particularly useful for individuals who minimize or deny eating pathology on other assessment measures.

Test meals can be used in a number of ways in treatment planning and evaluation. For example, a meal consisting of standard servings from each of the food groups could be administered. The amount of each food and overall calories consumed could be calculated. The same meal could be administered periodically throughout treatment, and change in the amount of food and calories consumed could be used as an index of treatment progress. Used in this way, test meals eliminate the inaccuracy associated with self-reported food intake and provide a useful index of dietary restraint (Anderson & Maloney, 2001; Williamson, 1990). A hierarchy of feared food can also be constructed and utilized as part of an exposure-type intervention (e.g., Leitenberg, Rosen, Gross, Nudelman, & Vara, 1988; Williamson, 1990). In this context, progress along the hierarchy can also be utilized as an index of treatment progress.
In summary, test meals can provide direct information about eating behavior and progress in treatment over and above the information gathered via interview, questionnaire, or self-monitoring. However, they can be somewhat difficult to conduct (e.g., having to prepare food), and they must be used cautiously because there is little information about their reliability, validity, or generalizability at the present time.

**Beck Depression Inventory–II (BDI-II).** Because depression is extremely common in persons with eating disorders, practitioners should assess depressive symptomatology regularly throughout treatment. Although a number of measures exist for the assessment of depressive symptoms, including the MAEDS (see above), the newest revision of the Beck Depression Inventory (BDI-II; Beck, Steer, & Brown, 1996) is one of the most widely used self-report measures in the field, with good psychometrics (Dozois & Dobson, 2002).

**DISCUSSION**

This review has hopefully highlighted some of the problems in the clinical assessment of the eating disorders and provided practitioners with guidelines for the use of existing assessment instruments throughout treatment. Increasingly, practitioners are being called upon by health maintenance organizations and insurers to justify their treatments and provide objective data on client progress and outcome. Using well-validated, standardized assessment instruments in all phases of the treatment process is a critical part of collecting this data.

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