PRACTITIONER POINTS

Rationale

Effective treatment of eating disorders requires multidimensional and individualized interventions. The emphasis on individualization is counter to a growing trend in some treatment settings to view clients as a generic group that should be treated with generic interventions (1). It also differs from standard nutrition interventions, which typically do not look at the underlying meaning of the eating behavior.

Anorexia nervosa and bulimia nervosa are eating disorders occurring primarily, though not exclusively, in adolescent and young adult females. Anorexia nervosa is associated with voluntary refusal to eat, weight loss of more than 15% ideal body weight, body image disturbance, and an intense fear of becoming fat. Bulimia nervosa is characterized by binge-eating episodes followed by self-induced vomiting, fasting, the use of laxatives or diuretics, or intensive exercise. These "binge-purge" episodes are often accompanied by depression and/or self-deprecating thoughts. Some individuals may display symptoms of both disorders.

Use

Dietary recommendations for patients with eating disorders include a kilocalorie level that meets current energy needs. For the patient with anorexia nervosa, small gradual increases are made in the kilocalorie level as tolerated. For clients with bulimia, the recommended kilocalorie level may be constant throughout the course of treatment. For both anorexia nervosa and bulimia, it is essential that a diet plan consider individual needs.

While a variety of meal patterns (including the Food Pyramid and Diabetic Exchange List Diet) can be used, the Core Minimum Guide was developed to aid the practitioner in moving the client away from a focus on kilocalories and more towards relaxed eating. The foods in each group (Dairy Protein, Bean/Meat Protein, Fruit/Vegetables, Grains, and 'Others') are not caloric equivalents and are interchangeable only within each group.

An exception is the Dairy Protein and Bean/Meat Protein groups that were adjusted to provide similar amounts of protein and can be used interchangeably. Since clients often fear many or all foods in these groups, the practitioner can use this flexible system to help the client select foods providing adequate protein while working around food fears.

It is helpful to reassure clients that actual caloric intake will be taken into account when diaries are reviewed. Some will want to know the exact calorie value of each food in the Core Minimum Guide. In this case, it may be helpful to work from specific calorie values, which can be written in, with the goal of moving away from calorie counting.

The "core minimum" is 4-4-5-9 (4 servings Dairy Protein, 4 servings Bean/Meat Protein, 5 servings Fruits/Vegetables, 9 servings Grains) and will provide between 1200 and 1400 kilocalories, although it may be more or less depending on actual food selection. Servings can be added from the "Others" Group (fat, sugars, etc.) but most clients are fearful and resistant to this. Once the client can consume the core minimum on a consistent basis, the kilocalories will need to be increased to meet individual energy needs. The dietitian may need to suggest specific increases, such as to 4-4-6-11 with a dessert and 3 teaspoons fat. The client may also be assisted to relearn eating as a response to hunger and recognition of satiety cues to determine the additional quantity of food needed.

Education that addresses the normal nutritional needs and the physiologic effects of starvation and refeeding is also a critical component of treatment. Management often requires long-term nutritional counseling of the patient which may extend several years.
Related Physiology

Both anorexia and bulimia are psychiatric disorders that are often accompanied by a variety of physical abnormalities resulting from the behaviors in which these patients engage. Every major organ system can develop abnormalities that range from minor changes to life-threatening aberrations. For this reason, proper medical evaluation and treatment is essential to recovery.

Criteria for Diagnosing Eating Disorders (2)

Anorexia Nervosa

A. Refusal to maintain body weight over a minimally normal weight for age and height (e.g. weight loss leading to maintenance of body weight less than 85% of that expected; or failure to make expected weight gain during period of growth, leading to body weight less than 85% of that expected).

B. Intense fear of gaining weight or becoming fat, even though underweight.

C. Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of the current low body weight.

D. In postmenarcheal females, amenorrhea, or the absence of at least three consecutive menstrual cycles. (A woman is considered to have amenorrhea if her periods occur only following hormone, e.g., estrogen administration.)

Specify type:

- **Restricting Type:** during the current episode of Anorexia Nervosa, the person has not regularly engaged in binge-eating or purging behavior (i.e. self-induced vomiting or the misuse of laxatives, diuretics, or enemas)

- **Binge-Eating/Purging Type:** during the current episode of Anorexia Nervosa, the person has regularly engaged in binge-eating or purging behavior (i.e. self-induced vomiting or the misuse of laxatives, diuretics, or enemas).

Bulimia Nervosa

A. Recurrent episodes of binge eating. An episode of binge eating is characterized by both of the following:

(1) Eating, in a discrete period of time (e.g. within any 2-hour period), an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances.

(2) A sense of lack of control over eating during the episode (e.g. a feeling that one cannot stop eating or control what of how much one is eating).

B. Recurrent inappropriate compensatory behavior in order to prevent weight gain; such as, self-induced vomiting, misuse of laxatives, diuretics, enemas, or other medications, fasting or excessive exercise.

C. Both binge eating and inappropriate compensatory behaviors occur, on average, at least twice a week for 3 months.

D. Self-evaluation is unduly influenced by body shape and weight.

E. The disturbance does not occur exclusively during episodes of Anorexia Nervosa.

Specify type:

- **Purging Type:** during the current episode of Bulimia Nervosa, the person has regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics, or enemas.

- **Nonpurging Type:** during the current episode of Bulimia Nervosa, the person has used other inappropriate compensatory behaviors, such as fasting or excessive exercise, but has not regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics, or enemas.
Eating Disorder Not Otherwise Specified (Eating Disorder NOS)

The Eating Disorder Not Otherwise Specified category is for disorders of eating that do not meet the criteria for any specific Eating Disorder. Examples include:

1. For females, all of the criteria for Anorexia Nervosa are met except that the individual has regular menses.
2. All of the criteria for Anorexia Nervosa are met except that, despite significant weight loss, the individual’s current weight is in the normal range.
3. All of the criteria for Bulimia nervosa are met except that the binge eating and inappropriate compensatory mechanisms occur at a frequency of less than twice a week or for duration of less than 3 months.
4. The regular use of inappropriate compensatory behavior by an individual of normal body weight after eating small amounts of food (e.g. self-induced vomiting after the consumption of two cookies).
5. Repeatedly chewing and spitting out, but not swallowing, large amounts of food.
6. Binge-eating disorder with recurrent episodes of binge eating in the absence of the regular use of inappropriate compensatory behaviors characteristic of Bulimia (criteria for BED).

Research Criteria for Binge Eating Disorder

To date, there has been minimal research on binge eating, and too little is known about BED to warrant allotment as its own diagnostic category (2). It has been designated to “Criteria Sets and Axes Provided for Further Study” in the DSM IV. Proposed criteria are as follows:

A. Recurrent episodes of binge eating. An episode of binge-eating is characterized by both of the following:

1) Eating, in a discrete period of time (e.g., in any 2 hour period), an amount of food that is definitely larger than most people would eat during a similar period of time, under similar circumstances.

2) A sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating).

B. The binge-eating episodes are associated with three (or more) of the following:

a) Eating much more rapidly than usual.
b) Eating until feeling uncomfortably full.
c) Eating large amounts of food when not feeling physically hungry.
d) Eating alone because of being embarrassed by how much one is eating.
e) Feeling disgusted with oneself, depressed, or feeling very guilty after overeating.

C. Marked distress regarding binge eating is present.

D. The binge eating occurs, on average, at least 2 days a week for 6 months.

Note: The method of determining frequency differs from that used for Bulimia Nervosa; future research should address whether the preferred method of setting a frequency threshold is counting the number of days on which binges occur or counting the number of episodes of binge eating.

E. The binge eating is not associated with the regular use of inappropriate compensatory behaviors (e.g. purging, fasting, excessive exercise) and does not occur exclusively during the course of Anorexia Nervosa or Bulimia Nervosa.

The etiologic factors related to eating disorders are unclear. Although the stereotypical client with an eating disorder may be a white female teen from middle to upper middle-class family, the disorder has spread to encompass all races, economic levels and both genders. Statistically, 3.2% of women between the ages of 18 and 30 years of age are affected by an eating disorder (3). Eating disorders, specifically Anorexia Nervosa, tend to develop between ages 11 and 15 in females and 15 and 18 in males. Likewise, Bulimia Nervosa is more often diagnosed in the mid-to-late twenties with a 5 to 10 year history of binge eating and purging (4, 5).
Cultural factors (the abundance of food in developed countries coupled with society’s emphasis on thinness as desirable and beautiful) probably play a role, as does family dysfunction (families described as overprotective, rigid, and lacking in conflict resolution). As a result, the child may grow up to be dependent, unassertive, excessively reliant on the approval of others, and low in self-esteem. At greater risk are gay men, athletes, and those who seek treatment for weight control (6, 7, 8).

**Role of Dieting in the Development of Eating Disorders**

Dieting has been implicated in the development of eating disorders, although it has been suggested that those who actually develop eating disorders are psychologically vulnerable. However, many question whether those with eating disorders develop the psychopathology prior to the onset of the eating disorder or following, given that eating disorder symptoms can be elicited by food restriction. Keys, et al. (9) restricted the intake of healthy men to approximately 1600 calories per day and found that subjects developed behaviors strikingly similar to those seen in individuals with eating disorders. These behaviors continued during the refeeding stages. (These men even complained of fat accumulating in their abdomen and buttocks). It has been concluded that diets involving drastic and even moderate caloric reductions, for prolonged periods, are dangerous (10). In fact, Hsu (11) posits that the prevalence of diagnosable eating disorders in a given population should be directly proportional to the prevalence of dieting behavior in the same population.

**Eating Problems and Sexual Abuse**

There is a relationship between sexual abuse history and mental health difficulties (12,13). Physical and sexual abuse have also been implicated in the development of eating disorders (14-17), with abuse more often seen in people with bulimia than people who restrict intake. Even frequent dieting or purging among adolescents is associated with negative psychosocial factors, including physical and sexual abuse (18). Dietitians working in the mental health field are more likely to work with victims of abuse than clinicians working with the general population. Additionally, dietitians working with chronic dieters may be treating abuse victims. Research has found higher levels of eating psychopathology in non-eating disordered women who have been sexually abused than in those who have not been abused (19, 20).

Dietitians often play pivotal roles in the identification and treatment of sexual abuse since they are often sought out as experts in food and weight related issues; areas in which survivors typically feel a great deal of pain. The dietitian’s interaction with these clients may be critical in terms of ensuring they receive appropriate treatment.

**Etiologic Factors in the Development of Eating Disorders**

Unfortunately, dietitians receive little training in either general or sexual abuse issues, making treatment that much more difficult. The use of externally regulated eating and weight loss, as sole indicators, can actually mask telling symptoms and reinforce dissociation from the body so typically seen in abuse victims (21).

It is evident that treating survivors of abuse is a specialty area and requires knowledge beyond that found in most professional training. Reading pertinent literature, attending conferences and professional supervision are needed (see resource list).
### ANOREXIA NERVOSA SYMPTOMATOLOGY

<table>
<thead>
<tr>
<th>Physical Signs</th>
<th>BULIMIA NERVOSA SYMPTOMATOLOGY</th>
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<tbody>
<tr>
<td>Maintenance of body weight</td>
<td>Limited weight loss</td>
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<tr>
<td>or loss leading to at least 15% below expected weight</td>
<td>Ipecac poisoning</td>
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<tr>
<td>Amenorrhea in females</td>
<td>Eating binges</td>
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<tr>
<td>Greatly reduced food intake</td>
<td>(tachycardia, cardiac dysrhythmia)</td>
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<tr>
<td>Hypothermia</td>
<td>Purges</td>
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<td>Dependent edema</td>
<td>Kidney disease</td>
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<td>Bradycardia</td>
<td>Frequent fluctuations in weight</td>
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<td>Hypotension</td>
<td>Electrolyte imbalance</td>
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<tr>
<td>Lanugo</td>
<td>Dehydration</td>
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<tr>
<td>Episodes of binging/purging</td>
<td>Decayed teeth</td>
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<tr>
<td>Elevated hepatic enzymes</td>
<td>Poor skin or hair</td>
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<tr>
<td>Delayed sexual development</td>
<td>Spastic colon</td>
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<tr>
<td>Susceptibility to bruising</td>
<td>Irregular heart beat</td>
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<tr>
<td>Decreased gastric emptying</td>
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### Emotional Signs

- Intense fear of obesity
- Disturbance of body image
- Refusal to maintain “normal” body weight
- Preoccupation with body
- Denial of illness/depression
- Compulsive behavior
- Lack of intimacy/peer relationships
- Lying/hiding/stealing
- Perfectionist
- Poor self-image
- Anxiety
- Feelings of hopelessness or despair

### Food and Eating Behavior

- Eating extremely slowly
- Preoccupation with food, nutrition and food preparation
- Secret rituals about food
- Low daily caloric intake
- Intense, frequent exercise

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### BULIMIA NERVOSA SYMPTOMATOLOGY

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<tr>
<th>Physical Signs</th>
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<tbody>
<tr>
<td>Poor teeth</td>
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<td>Poor hair/ hair loss</td>
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<tr>
<td>Dehydration</td>
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<tr>
<td>Muscle spasms</td>
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<td>Constipation or diarrhea</td>
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<td>Fatigue</td>
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<td>Dizziness</td>
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<td>Dysrhythmia</td>
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<td>Irregular heart beat</td>
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### Emotional Signs

- Awareness of abnormal eating pattern
- Depressed mood following binges
- Intermittent abuse of chemical substances
- Preoccupation with body
- Difficulty with intimacy
- Lying/hiding/stealing

### Food and Eating Behavior

- Eating binges (For example: 2,000-30,000 calories per binge in a short time frame of 1-2 hours)
- Purging/vomiting
- Laxatives
- Social and sleep interruption
- Secretive binge/purge behavior
- Eating “forbidden foods” such as sweets, salty or high calorie foods
Nutrition for Eating Disorders

Treatment Overview

Medical nutrition for eating disorders differs from other nutrition therapies. Since dietitians typically meet with these clients over a longer period of time, they encounter the more complicated dynamics of extended therapeutic relationships. Unfortunately, most dietitians are not trained to effectively deal with this type of counseling. Instead, dietitians are taught the medical model of client care, "1) short-term intervention primarily of an educational nature, 2) a minimal relationship, and 3) a quickly determined, often standardized, plan of action. This approach works well when education of the person is the primary objective" (21).

In contrast, a psychotherapeutic model involves, "1) long term care, 2) a significant relationship that in and of itself is a key part of the therapeutic process, and 3) a treatment plan that is highly individualized and evolves over time" (21). This is the model most often used in the treatment of eating disorders. Therapists are trained in this model and receive at least a year of professional supervision to fine-tune therapeutic strategies and techniques. This supervision often helps them identify their own issues, which may interfere with the therapeutic process.

It is recommended that dietitians who intend to work with eating disordered clients receive some form of professional supervision, either from a dietitian or a therapist skilled in treating eating disorders. This will enable them to better understand and deal with the denial, manipulative behavior, power struggles, countertransference and other issues that may arise (22).

Some professionals believe that for the dietitian to become proficient in working with eating disorders, they "must ignore the traditional philosophies of the profession" (21) and develop psychotherapeutic skills. The dietitian will need to become familiar with the issues that underlie the disorder and reinforce the client's emotional progress. It is essential that the dietitian remain within her/his scope of practice, focusing on the food behaviors, while referring emotional issues back to the therapist.

Overall, the dietitian's role encompasses initial assessment of the patient's nutritional status, confronting the patient's food and nutrition issues and associated behaviors, regularly monitoring the patient's treatment response, and communicating with and supporting the efforts of the other interdisciplinary team members as necessary (23). Nutritional requirements for the life stage of the affected individual, nutritional rehabilitation treatments, and ways to restore normal eating patterns are the foundation for effective treatment (23).

Nutrition Therapy

Initial assessment includes assessing the individual’s nutritional status, knowledge base, motivation, and current eating and behavioral status. In developing the treatment plan, the registered dietitian is instrumental in devising the nutrition portion, while collaborating with the team and the patient's goals for recovery. Then, it is the dietitian's responsibility to implement the treatment plan and support the patient in accomplishing the goals set out in the treatment plan. Assistance in medical monitoring of electrolytes, vital signs, weight, nutritional intake, and eating behaviors are essential to carry out the monitoring and evaluation portion of the nutrition care process. The bases of nutritional treatment are nutrition education, meal planning, establishment of regular eating patterns, and discouragement of dieting (23).

Initially, the dietetic professional must establish a collaborative relationship, building trust and rapport with the client. Nutrition education is important to help the client understand why and how the body responds to starvation, bingeing, and/or restriction (24).

The dietitian must help with food selection while establishing a safe weight range and exploring hunger and eating patterns. The dietitian will need to help the client separate food and weight related behaviors from feelings and psychological issues.
Reconnecting with Hunger and Satiety

Most clients seeking treatment are actively dieting and/or seeking better ways to restrain themselves from food. However, recovery involves the clients’ discovery of attuned eating and learning to respond to internal signals of hunger and satiety (1, 22, 25). The inability to do so must be explored to discern the adaptive functions of the eating disordered behavior (26, 27). Very little training is offered to help dietitians in hunger/satiety work with clients, as there is no current data showing the transferability of this concept during a single consultation with a registered dietitian. However, new research is being uncovered in regards to the link between a concept called “mindful eating” and reducing the frequency of binges and emotional eating. Mindful eating involves being attuned to hunger, fullness, and taste satiety cues (28). A “health at every size” approach to weight loss has been shown to garner more positive results compared to the common structured diet. Such outcomes included weight loss and maintenance, total cholesterol, activity and eating behavior measures, and psychological measures. The “health at every size” approach integrates accepting size and listening to hunger and fullness cues (29). Further resources are available and recommended to assist the dietitian in facilitating this work (22, 27, 29, 30).

Uncomfortable thoughts and/or feelings can trigger the disordered eating behavior. Eating does not solve the problem or take away the feelings, but it allows clients to temporarily stop focusing on them. The unresolved emotions remain. Treatment should include psychotherapy to allow the client to work through underlying thoughts and conflicts that have caused the high levels of anxiety and low levels of self-esteem (24).

Challenging the client's eating habits will tend to provoke substantial resistance. Since disordered eating is used, albeit ineffectively, to help cope with life issues, changing the eating behavior often leaves a client uncomfortable and/or unable to deal with these life issues. The eating behaviors, as well as the resistance to change, will offer significant clues regarding the adaptive function of the client's disturbed eating behavior. The dietitian's approach to normalizing food intake will need to vary according to the client's specific needs (26).

The use of weight loss in the treatment of those with eating disorders who are “overweight” has been controversial, especially since restricting food intake is often a precipitant to the eating disorder. And some believe that when one is dieting, emotional eating issues are more difficult to identify and treat and, thus, actively seeking weight loss during recovery is contraindicated (20). Proponents argue that obese patients with BED do not benefit from weight control programs (22). Treatment should focus on the binge eating rather than weight loss (32). They argue further that the real risks to health and longevity are more likely the result of dieting than from stable weights that are above recommendations (33). Contrary to this and many prevailing notions, experts believe that the ill effects of obesity are greatly exaggerated (24). However, given the complex and often contradictory nature of the available literature on obesity, “definitive proof of any given hypotheses about weight-health correlation is almost impossible at the present time” (33).

This does not mean that we should ignore weight or those with weight-related struggles. Rather, it means that focusing primarily on weight loss is counterproductive, and may be quite hazardous to the health for those who continually “battle their weight” (33). See Figure 1, “Health at Every Size/Nondiet” for further discussion.

Use of Exercise

There is considerable variability in exercise habits of those with eating disorders. Regimens range from all-consuming exercise compulsion to complete exercise resistance. It is important to assess what adaptive function the exercise, or lack of it, may be serving for the client.

Strenuous and/or excessive exercise can be used by those with eating disorders to compensate or punish for excessive caloric intake (real or imagined). It can be used to “avoid life” and often results in negative
physical, social, or vocational consequences. This type of exercise results in amenorrhea, oligomenorrhea, or even menorrhagia. A secondary complication to amenorrhea is osteoporosis due to low estrogen levels (1). Over exercise also causes a variety of musculoskeletal problems, including stress fractures.

While most who abuse exercise are lean individuals, this stereotype overlooks those large individuals who get locked into compulsive exercise. Unfortunately, they are often praised for their dedication. Meanwhile, the true nature of their unhealthy relationship with exercise remains unaddressed (34). The signs and symptoms of compulsive exercise are as follows (35):

**Symptoms of Exercise Addiction:**

- Need to exercise daily to maintain basic level of functioning.
- Express minor withdrawal symptoms (irritability, guilt, anxiety) when unable to exercise for a day or two.
- Experience major withdrawal symptoms (depression, loss of self-esteem, lack of interest in other activities) when unable to exercise for longer periods of time.
- Exercise even against medical advice.
- Risk physical injury.
- Deny pain.
- Organize life around exercise.
- Place exercise above everything else, including job or relationships.
- Strive for greater achievement, no matter how fit or healthy.

Though people who quit exercising are often seen as lazy, professionals are more often viewing them as “exercise resistant” and working with them to resolve this resistance (22). This involves exploring past relationship with exercise as well as current relationship with the body, in an effort to help the client reconnect with the joy of movement (33).

**Working with a Therapist**

It is important to develop a working relationship with the therapist treating the client. A discussion of nutrition therapy and a clear statement of boundaries in caring for the client will foster the needed team approach in treatment. Communication with the therapist is essential and will aid in developing a treatment plan, determining how many sessions you will need with this client, and establishing a fixed schedule for reassessment (26).

**Supervision**

Professional supervision with a therapist or dietitian skilled in treating eating disorders is recommended (22, 36).

**Pharmacotherapy**

A variety of medications have been studied for treating anorexia nervosa. While weight gain has been the primary factor measured, relatively minimal attention has been given to psychological concerns. Results have demonstrated little effect on these measures (38). There is good evidence to indicate that antidepressants of all types are effective in the short-term treatment of bulimia nervosa (5), although results are typically inferior to those gained with psychotherapy. Specifically, antidepressants, appetite suppressants, anticonvulsants, either decreased the frequency of binges and/or enhanced weight loss (39). Relapse at the end of treatment is common (38). Focus of the studies has primarily been changes in eating behaviors. Psychological components of the illness have received less attention (38). Pharmacotherapy has been shown to diminish eating disordered behavior and improve mood in patients with bulimia nervosa (40, 41). Nevertheless, the benefits do not extend beyond the termination of the pharmacotherapy (23). Additionally, results of mixing pharmacotherapy and cognitive behavior therapy or behavioral weight-loss programs have been varied. Because binge eating disorder is related to various forms of psychopathology, the pharmacotherapy and nutritional counseling interventions should be adapted appropriately (23).

Some medications can cause increased appetite and hyperinsulinemia (42), which can potentially cause significant distress in patients. Initiation of these
medications can be contributed to the onset of eating disordered behaviors. It is critical to work with the treatment team to determine the amount and extent of information provided to the patient with relation to the effects of their medication(s) on appetite, weight, insulin and glucose, and when is best to provide it. Some patients are at risk of discontinuing medication that helps them function mentally on a day-to-day basis in order to lose weight. Not knowing that appetite and/or weight increases are the result of medication can lead to feelings of guilt and self-doubt. Consideration must be given to the needs of the patient when discussing this information (43).

**In-Patient versus Out-Patient Treatment**

Treatment may occur on an inpatient or outpatient basis. Out-patient is the preferred approach and provides a variety of programs ranging from 3-1/2 weeks to one year. It is generally recommended that clients, who have not been able to make any progress after six months of out-patient therapy, be considered for more intensive therapies, either an intensive out-patient or in-patient program. Generally, in-patient should be considered if any of the following are present (21):

1. Rapid, progressive weight loss (1 to 2 pounds per week) in spite of competent psychotherapy
2. Failure to gain weight or alter purging behavior in spite of at least six months of competent psychotherapy
3. Severe metabolic derangements (serum potassium level less than 2 milliequivalents per liter, fasting blood glucose level less than 50 milligrams per 100 milliliters, creating level greater than 2 milligrams per 100 milliliters)
4. Certain cardiac dysfunctions (prolonged QT interval, ventricular ectopy)
5. Syncope
6. Psychomotor retardation
7. Inability to perform activities of daily living
8. Suicide risk

**Nutrition Assessment**

Nutrition therapy begins with assessment of dieting behavior to determine when it first began, why and whether there were sources of encouragement.

It is also important to assess the extent of psychological and physiological deprivation experienced as well as the cognitive-emotional system that has evolved around the behavior (1). Does the client think of food as “good” or “bad”? How do these distinctions affect food choices? Clinicians must also assess magical or superstitious thinking associated with food-related behaviors by exploring their understanding of calories, digestion, dietary fat, body fat, fad diets, etc.

It is important to assess what adaptive function the exercise may be serving for the client since exercise can become highly ritualized and very debilitating. For example, does the exercise serve as a method of purging or of avoiding core issues? Is it used to self-soothe or self-punish (1)?

Clinicians must also assess the extent to which either psychological or physiological deprivation is triggering binge eating or specific food cravings. Research has indicated that some individuals who chronically restrain from eating are highly vulnerable to counter-regulatory (compensatory) episodes of binge eating. Research further indicates that most physically starved individuals are highly vulnerable to impulses for binge eating as a result of biological pressures to obtain calories (1).

**Bulimia Nervosa**

In the initial assessment of the individual with bulimia nervosa, it is critical to evaluate medical complications resulting from purging. Nutritional abnormalities depend on the amount of restriction during the nonbinge episodes. Purging behaviors do not completely exempt the calories from the binge as an approximate 1,200 kcals are retained from binges of various sizes and contents (44), and laxatives are ineffective at minimizing energy absorption, while being effective at greatly increasing water losses. Chronic syrup of ipecac use, to induce vomiting, has been shown to have severe medical consequences and is especially damaging to the heart muscle (23).
Binge Eating Disorder

A detailed account of the onset of binge eating, a history of weights and dieting practices, any past traumatic events that may have triggered binge eating episodes, and a history of diet attempts and outcomes is essential to assessing this type of patient (23).

Overview of Dietary Treatment

Refeeding

It is advisable to start with a moderate amount of calories (1,000 to 1,500 calories) so as to avoid the complications of rapid refeeding in an emaciated patient; such as acute gastric dilation or massive peripheral edema.

Nutrition-repletion methods, such as nasogastric tube feedings and peripheral intravenous feeding, should only be used in life-threatening situations due to increased medical and psychological risks involved. When using these techniques, rate of refeeding must be monitored carefully (45). Nutrition-repletion methods should never be used as punishment.

The goal of dietary treatment in anorexia nervosa is to help the client re-establish a normal eating pattern and restore a healthful weight. The primary therapeutic goal is to restore body weight and, for women, regain menses. Calcium (1,500 mg/day) with vitamin D (400 IU/day) supplements, as well as selective estrogen receptor modulators for women, may be beneficial to include (46). During the refeeding phase, gradual advancement of nutrient intake and close monitoring is recommended due to the dangers of rapidly reintroducing food into a cachectic patient (47).

This is also the ultimate goal in bulimia, but the client must first gain control of the binge-eating episodes. The primary goal of treatment for bulimia nervosa is to reduce or eliminate binge eating and purging behavior. Cognitive behavior therapy is the most effective treatment to date (19,39). Developing a pattern of normal eating, with three meals and appropriate snacks per day, is essential in breaking chaotic eating behaviors. This allows the individual to become reacquainted with internal hunger and satiety cues while also changing behaviors to move away from restriction and the binge–purge cycle. Energy intake should initially be based on the maintenance of weight to help limit hunger because this can be a trigger for a binge (23).

"Clinical judgment dictates whether specific dietary instruction should be avoided entirely. Some clients, especially children, respond best when the external pressure to eat is removed and the normal drive to eat is allowed to reassert itself. In other instances, specific advice about meal plans and food choices helps structure the dietary guidelines and resolve decisions about eating. Care must be taken not to reinforce the compulsive rituals and the preoccupation with food. Principles, rather than rigid plans, should be conveyed (45)."

Standard, traditional recommendations for clients with eating disorders have been specific and rigid. This can lead to frustration and failure on the parts of both client and practitioner because they do not take into account individual needs and concerns.

A "how-to" list for dietary management by Dudek (48) suggests:

1. Provide basal calorie requirements plus 300 to 400 calories initially, then gradually increase to a high-calorie diet to promote weight gain.
2. Provide small frequent feedings to maximize intake.
3. Limit fat intake initially if GI intolerance exists.
4. Limit sodium intake if fluid retention is a problem.
5. Avoid caffeine, which acts as both a stimulant and diuretic.

These, while useful, convey the approach as one that is rigid and unchangeable. Meanwhile, what is appropriate for one client may not be appropriate for another. And as clients make changes, previously inappropriate suggestions may become helpful. For example, the suggestion for small frequent feedings may help some maximize intake, while overwhelming others with how many times each day they must be
involved with food. For the latter, three larger meals may be more effective.

During acute stages of nutrient depletion, when hospitalization and immediate nutritional intervention are often necessary, specific guidelines may be needed. However, during long-term recovery, it is essential that the dietitian be flexible, open-minded and willing to work individually with each client. Underlying beliefs, concerns and habits about food and weight will need to be addressed in long-term nutrition counseling; none of which fits neatly into a how-to list.

Realistically, the role of the dietitian is to help the client alter her or his ideas about food and weight, so it is important to keep the goals of healthy intake and normalized food behaviors in focus.

In order to be successful, the client must understand and agree that the final goal of nutritional counseling is to be able to eat a meal when hungry, to stop when comfortably full, and to do so at least three to four times per day, without thinking or obsessing about food or about body weight (24). The dietitian must understand that, especially with this population, changes in food behaviors and weight occur very slowly.

Time for recovery varies and will depend on the client, their progress in psychotherapy, and the dietitian's ability to listen, separate emotional issues from food issues, and provide appropriate feedback and dietary recommendations.

**Establishing a Dietary/Eating Pattern**

Careful planning of refeeding after periods of starvation, restrictive eating, or vomiting is essential to reduce physiologic stress and optimize the restoration of normal function and absorptive efficiency of the GI tract. It is recommended that kilocalories be increased gradually. Fat and milk products, due to lactose intolerance, may initially be difficult to digest for some people with anorexia (49).

When the client's condition is life threatening or he/she is unable to cooperate by consuming food voluntarily, tube feedings or total parenteral nutrition may be warranted.

Use of food selection plans with food groups allows clients to select a greater variety of foods. Focusing on food groups rather than calories can provide an opportunity for clients to focus on qualities of food other than energy value and let go of the distrust of certain foods.

Clients may benefit from prepared daily meal plans and sample menus designed by the dietitian with the client's input. For clients able and willing to eat in response to internal signals, a meal plan can be counterproductive and may be omitted.

A variety of food selection plans can be used; such as MyPyramid or the Core Minimum Guide (50). The Diabetic Exchange List can be used; however, the emphasis on caloric equivalents may be counterproductive with some clients. Food lists should include desserts, sweets and favorite foods.

Most clients will need help in recognizing and selecting foods, as it may have been years since they consumed a balanced diet. Occasionally, clients have never had the opportunity to consume a balanced diet, especially in cases where the primary caregiver has issues regarding food and weight.

The Core Minimum Guide is designed to be used as either a loose or more structured meal plan. It should be presented as a minimum guideline, and be emphasized that the client may eat more of any of the foods, or eat foods that are not on the plan as long as the core minimum is eaten. At this point, the practitioner can work with the client to help them relearn responses to the inner cues of hunger and satiety to determine the quantity of food needed. A diary that allows tracking of hunger and satiety is quite helpful (51). The Core Minimum Guide is included on page G1.20 of this course for your reference/use.
<table>
<thead>
<tr>
<th></th>
<th>Traditional Approach</th>
<th>HAES Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ideology</strong></td>
<td>Excessive fatness, as defined by standardized tables, is unhealthy. Goal is weight loss or weight maintenance.</td>
<td>Healthy weight is highly individualized and cannot be determined by a standardized table. The healthiest weight is a natural weight one can maintain without dieting. Goal is to enhance health and treat medical problems if present.</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>Counsel clients to reach and maintain the defined weight even if it means permanent food restriction.</td>
<td>Teach clients that the body will seek its natural weight as one eats in response to bodily cues and is physically active. This weight may be higher than society advocates.</td>
</tr>
<tr>
<td><strong>Hunger</strong></td>
<td>Assist clients to suppress or ignore hunger in order to be able to follow meal plan. Hunger and satiety typically are irrelevant in eating patterns.</td>
<td>Assist clients to relearn to eat in response to internal cues of hunger and satiety. Explain that doing so (most of the time) will aid the body in returning to and maintaining natural weight and reinforce need to trust these cues.</td>
</tr>
<tr>
<td><strong>Food</strong></td>
<td>Externally regulated eating. Counsel clients to follow meal plan, teach avoidance of &quot;bad,&quot; &quot;illegal,&quot; or &quot;unhealthy&quot; foods and use of cognitive behavioral methods to restrict caloric intake. If clients relapse, counsel to return to food plan.</td>
<td>Internally regulated eating. Explain to clients food is not the problem, but restricting certain foods is (making food forbidden and more desirable); therefore, no foods are forbidden. Assist clients with a gentle openness that allows them to listen to their bodies' feedback without judgment. They will begin to desire healthier food when they have nonjudgmental free access to all foods.</td>
</tr>
<tr>
<td><strong>Self/Size Acceptance</strong></td>
<td>Assist with weight loss because clients will feel better about themselves closer to an ideal weight. Clients typically feel more powerful when starting diet, but lose self-esteem if they are one of the 95% of those who fail to lose and maintain weight loss.</td>
<td>Work with clients to increase self-esteem and personal power from self-determined eating style and movement. Help clients realize that healthy bodies come in all shapes and sizes that cultural norms can be dangerous, and pursuit of them can interfere with quality of life. Refer clients to support for reinforcement required to make these changes.</td>
</tr>
<tr>
<td><strong>Trust/Distrust of Self and Body</strong></td>
<td>Clients’ trust is put in the health care provider. Clients often come to distrust their own body and sense of judgment, especially when there is a history of failure with dieting.</td>
<td>Teach clients to trust themselves and their bodies. Trust in other areas builds as clients learn they can eat when hungry, stop when satisfied, and enjoy movement. Ensure clients are learning to live without judgment or criticism of own or others' weight and eating.</td>
</tr>
</tbody>
</table>
A regular pattern of food intake can help in preventing the intense hunger sensations that may increase anxiety and precipitate a binge. The pattern should include three meals and snacks (at the client's preference) that encourage the client to eat throughout the day (24). Over time, this plan can be altered to promote balance and variety of intake, by adding foods and food groups that have been omitted over the course of the disorder.

Weighing and measuring should be rudimentary only, yet sufficient enough to follow the portion guides. This is another area that can be over-emphasized by the client, distracting her/him from the greater task.

Some believe eating disordered individuals are unable to respond normally to internal cues related to hunger and satiety, however, much success has occurred by helping clients relearn to respond to signals of hunger and satiety (22, 20). The concept that non-hunger eating, not specific foods, is what puts on excess weight is difficult for clients to understand. To aid in identifying hunger, a scale that uses numerical indications of the presence or absence of hunger can be utilized (22). Since these descriptions are highly subjective, it is preferable to use a blank form and have patients fill out their own descriptions with the assistance of the dietitian.

Anorexia

When food intake has been insufficient to meet energy needs, basal metabolic rate declines. In severely malnourished patients, the basal metabolic rate may be more than 40% below that predicted using the Harris-Benedict equation.

Physiological symptoms may present during refeeding, such as hypophosphatemia, edema, cardiac failure, seizures, and death. Also, cardiovascular complications pose a significant risk and contribute to the high mortality rate (23).

During refeeding, gradual adjustments in nutrient intake, starting at 30 to 40 kcal/kg/day of actual body weight (may start at 1,000 to 1,200 kcal per day) and incrementally advancing to achieve weight gain, are recommended. A weight gain of 0.5 to 1.0 lb. per week is ideal (52).

The increase in kilocalories should be made slowly to allow time for the psychological changes needed for the acceptance of the weight gain. With some clients, the kilocalorie content of the diet may not be changed for several weeks (or months) if efforts need to be directed toward difficult changes in other areas; such as eating patterns or expanding the variety of foods eaten or if they are undergoing particularly difficult psychotherapeutic work with their therapist.

Bulimia

The kilocalorie level should initially be such that it is acceptable to the client while stabilizing the weight. If the kilocalorie level is set too high, the client may experience discomfort or fear weight gain and may be tempted to purge or fast. If the kilocalorie level is too low, this restriction of food can result in further binge eating. Initially, the emphasis is not to change weight, but to establish more appropriate eating patterns.

The initial kilocalorie level can be set by determining the basal kilocalories using the Harris-Benedict equation for present weight. A diet planned at this level usually results in a weight stabilization. If the client is very active, a kilocalorie allowance for activity may be added that is equal to 10 to 15 percent of the basal kilocalories. The above formula cannot take into account changes in hunger that occur naturally on a day-to-day basis or with the menstrual cycle. For this reason, it is recommended that the dietitian work with the client to move to a non-restrained pattern of eating.

In designing the meal pattern, the priorities are similar to those in anorexia nervosa. An initial structure of three adequate meals each day is important and will help minimize eating binges. Eliminating restriction from the binge/purge/restrict cycle will help to clarify if the client is binging primarily in response to their semi-starved state or to moderate their mood states. This allows the individual to become re-acquainted to their internal hunger and satiety cues while also attempting to change behaviors so as to avert from restriction and the binge–purge cycle (23). The use of snacks needs
to be carefully considered. Some clients experience snacks as a trigger for a binge. Others need snacks to help prevent overwhelming hunger between meals that can trigger a binge. Fasting, skipping meals, and eating inadequate amounts at meals may cause bingeing. Initially, energy intake for weight maintenance is recommended to aid in reducing hunger as this may be a trigger for a binge (23).

Binge Eating Disorder

Many of the nutrition counseling approaches for Bulimia Nervosa can be used for Binge Eating Disorder. Binges may largely contribute to energy intake and lead to overweight or obesity. Normalization of eating behaviors should be the primary goal, due to its favorable impact on weight loss. Weight maintenance may be an indicator of fewer or decreased binge episodes, so the dietitian should recognize this as an accomplishment (23).

Using Food Diaries

Many clients with bulimia find keeping food records helpful in reinstating the "control" that they feel is gone as they eat without purging. By recording time of eating, amount eaten, hunger and anxiety levels and feelings (emotional and physical) after eating, with a notation about bingeing and purging episodes; these records become a diary that can reveal information about urges to binge/purge and attempts to curb them. Diaries are also valuable tools that enable the client and dietitian to see progress, as well as highlight areas that require more focus. Hunger and satiety are sometimes difficult for the client to assess, and diaries can be designed to assist in this process. Portion sizes listed on food plans can also help in providing concrete examples and easing the anxiety of making choices based on an as yet uncertain sensation. The focus should be on food groups and portion sizes. Calorie counting should be discouraged, as it can become the area of focus, distracting from the larger goals. Food records may help treat clients with anorexia, too, as long as they remain general and flexible.

Special Considerations

Eating Disorders as Addictions

"The apparent similarities between binge eating, addictive behavior and psychoactive substance abuse are obvious. Both alcoholics and binge eaters refer to ‘cravings’ and ‘loss of control’ in trying to make sense of their problems. Both become preoccupied with the substance, and make repeated attempts to stop. Both disorders impair the individual’s physical and social functioning, and both may involve denial and secrecy. Binge eating is often used to regulate emotions and cope with stress in a manner similar to alcohol or drugs. But this functional similarity does not make binge eating an addictive disorder. They are only superficial commonalities (24)."

Abstinence Model

The notion of addiction-as-a-disease (AAD) is often extended to binge eating. "According to this thinking, some individuals are biologically vulnerable to certain foods (ex. sugar or white flour, defined as toxic chemicals) that can cause dependence, that the disorder is a progressive illness that can never be eliminated but only managed as a lifelong problem, that treatment must begin by interrupting (detoxifying) the abuse of food, and that since the etiologies of chemical dependence and eating disorders are similar, treatment for eating disorders should not differ fundamentally from that of alcohol or drug dependence. It follows logically from these premises that the recommended treatment is a 12-step program-Overeater’s Anonymous (OA) - that is modeled after Alcoholics Anonymous (AA). Bemis has referred to this AAD model as the abstinence model of eating disorders. As applied to a psychoactive substance use disorder such as alcoholism, the defining clinical features of the AAD notion are tolerance, physical dependence, loss or control over use, and/or craving.”

Some strategies that are useful in the treatment of binge eaters, such as self-control techniques and relapse prevention, were developed in the treatment of alcohol abuse. However, by the traditional criteria of
tolerance, physical dependence, loss of control, and craving, binge eating does not fit the addiction-as-a-disease model (AAD) (37). Johnson and Connors recommend that if a client “adheres to any sort of abstinence model, we feel it should be regarding purging” (1).

Recovery from Eating Disorders

Studies of the recovery rates and factors for anorexia and bulimia seem to indicate greater success with bulimia than with anorexia. A 1993 study found that one year after treatment, 56% of bulimics were in recovery while only 10% of anorexics were (24). For anorexia, indicators of relapse appear to be (24):

- Body weight, with the risk of relapse increasing by 18% for every 10% loss below normal body weight
- Longevity of the disorder
- Evidence of vomiting

The mortality rate for anorexia and bulimia approaches 20% in their advanced stages, higher than any other psychiatric illness (24). As noted above, given the mortality rate and the potential severity of medical conditions that can arise with these eating disorders, for anyone suspected of having an eating disorder, it is critical that the dietitian be able to:

1) Recognize symptoms
2) Understand how to talk with clients in a way that will not exacerbate the problems
3) Promptly refer clients for medical treatment before the condition has a chance to progress

Nutrients Modified

Since nutrition therapy is individualized throughout treatment, it is difficult to predict baseline nutrient intakes. With this in mind, this meal plan is designed to be modified over time to eventually provide nutrients adequate for age and gender. This diet will ultimately provide high amounts of complex carbohydrates, moderate amounts of protein, and moderate to low amounts of fat.

Nutritional Adequacy

The baseline kilocalorie intakes in anorexia nervosa as well as bulimia may be low, resulting in less than 100% of the Recommended Dietary Allowances (RDAs) and Dietary Reference Intakes (DRIs) for all nutrients. As the kilocalorie level is gradually increased with treatment and food choices broaden, the diet will meet or exceed the RDA and DRIs for all nutrients.

A daily multivitamin/multimineral supplement is recommended to replace any deficits acquired during the illness and to provide adequate vitamins and minerals for building new tissue. Chewable supplements are useful for those with impaired digestion or difficulty with swallowing.

Nutrition Care Process

Step One: Nutrition Assessment

Nutrient Intake (53)

1. Calories
   a) Compare intake with DRI
   b) Estimate typical intake in AN
   c) Determine average intake and range of intake in BN
   d) Determine hidden sources (e.g., gum, hard candy)

2. Macronutrients
   a) Carbohydrate
      i. Determine percent kcal intake
      ii. Compare intake to DRI intake
      iii. Simple
      iv. Complex
      v. Fiber: soluble vs. insoluble
   b) Protein
      i. Determine percent kcal intake
      ii. Compare intake with DRI
      iii. Evaluate vegetarian diet for high biologic value sources
   c) Fat
      i. Determine percent kcal intake
      ii. Source of essential fatty acid
3. Micronutrients
   a) Vitamins
      i. Water-soluble
      ii. Fat-soluble
   b) Minerals
   c) Calcium
   d) Iron
   e) Zinc
   f) Identify supplements

4. Fluid
   a) Determine total daily consumption
   b) Identify sources

5. Miscellaneous
   a) Alcohol
   b) Caffeine
   c) Amount and type of nonnutritive sweeteners and fat substitutes
   d) Other nutritional supplements (e.g., herbal supplements)

Eating Behaviors (54)

1. Eating attitudes
   a) Food aversions
   b) Safe, risky, forbidden foods
   c) Magical thinking
   d) Binge trigger foods
   e) Ideas on appropriate amounts of food

2. Eating behaviors
   a) Ritualistic behaviors
   b) Unusual food combinations
   c) Atypical seasoning of food
   d) Excessive and atypical use of non-caloric Sweeteners
   e) Atypical use of eating utensils

3. Eating habits
   a) Intake pattern
      i. Number of meals and snacks
      ii. Time of day meals and snacks are consumed

iii. Duration of feedings
iv. Eating environment-where and with whom
v. How consumed-sitting or standing
b) Avoidance of particular food groups
c) Variety of foods consumed
d) Fluid intake-restricted or excessive

Laboratory Assessment (55)

1. Albumin
2. Prealbumin
3. Cholesterol
   a) Total cholesterol
   b) LDL
   c) HDL
   d) Triglycerides
   e) Glucose
4. Hemoglobin
5. Hematocrit
6. MCV
7. RBC
8. Serum ferritin
9. Serum Iron
10. TIBC
11. Transferrin
12. BUN
13. T3
14. WBC
15. CO2
16. Amylase
17. Vitamin and mineral deficiencies
   a) Riboflavin
   b) Vitamin B6
   c) Thiamin
   d) Niacin
   e) Folate
   f) Vitamin E
   g) Zinc
   h) Calcium
   i) Magnesium
   j) Vitamin D
   k) Vitamin A (carotene)
18. Fluid and electrolyte imbalance
   a) Potassium
   b) Sodium
   c) Chloride
Nutrition for Eating Disorders

Anthropometric Assessment (55)

1. Height
2. Weight
   a) UBW
   b) IBW
   c) %IBW
   d) BMI
   e) Frame size
   f) Weight changes
   g) Body fat percentage

Physical Findings (55)

1. Edema
2. Skin
   a) Yellow dry skin
   b) Acrocyanosis
   c) Calluses
   d) Lanugo
3. Hair and nails
   a) Dry, brittle hair
   b) Brittle nails
4. Cachexia
5. Mental status
6. Diarrhea/constipation
7. Nausea/vomiting
8. Glands
   a) Salivary gland enlargement
9. Teeth
   a) Enamel erosion

History

1. Personal History
2. Past Medical History
3. Social History

Energy and Fluid Needs

Resting energy expenditure (REE) is typically low in malnourished AN patients and BN patients may have metabolic rates that are unpredictable. Therefore, routine baseline and follow-up assessment of REE is necessary throughout the course of treatment (55)

Step Two: Nutrition Diagnoses

Common Nutrition Diagnoses for Eating Disorders (56)

Intake Domain
- Inadequate energy intake
- Excessive energy intake
- Inadequate oral food/beverage intake
- Excessive oral food/beverage intake
- Inadequate fluid intake
- Malnutrition
- Inadequate protein-energy intake
- Imbalance of nutrients
- Inadequate fat intake
- Excessive fat intake
- Inadequate protein intake
- Inadequate carbohydrate intake
- Excessive carbohydrate intake
- Inadequate fiber intake

Clinical Domain
- Altered GI function
- Impaired nutrient utilization
- Altered nutrition-related laboratory values
- Underweight
- Overweight/Obesity

Behavioral-Environmental Domain
- Food- and nutrition-related knowledge deficit
- Harmful beliefs/attitudes about food or nutrition-related topics
- Not ready for diet/lifestyle change
- Disordered eating pattern
- Limited adherence to nutrition-related recommendations
- Undesirable food choices
- Excessive physical activity
- Poor nutrition quality of life

Nutrition Diagnoses Examples:
- Disordered eating pattern related to obsessive desire to be thin as evidenced by BMI 17 and reports of regular fasting.
- Underweight related to harmful beliefs about food,
nutrition, and nutrition-related topics as evidenced by refusal to eat and BMI <5th percentile.

- Excessive oral food/beverage intake related to loss of appetite awareness as evidenced by binge eating patterns.

Step Three: Nutrition Intervention

Common nutrition interventions for eating disorders (56)

1. Food and/or nutrient delivery
   a) Small, frequent, balanced meals
   b) Progressively increased energy intake every 2-3 days
   c) Vitamin and mineral supplements

2. Nutrition Education (53)
   a) Impact of malnutrition on growth and development and behavior
   b) Set-point theory
   c) Metabolic adaptation to dieting
   d) Restrained eating and disinhibition
   e) Causes of bingeing and purging
   f) What does “weight gain” mean?
      i. Glycogen storage
      ii. Fluid balance
      iii. Lean body mass
      iv. Adipose tissue
   g) Impact of exercise on caloric expenditure
   h) Ineffectiveness of vomiting, laxatives, and diuretics in long-term weight control
   i) Portion control
   j) Food exchange system
   k) Meal planning
   l) Social dining and holiday dining
   m) MyPyramid food guidance system
   n) Hunger and satiety cues
   o) Interpreting food labels
   p) Nutrition misinformation

3. Nutrition Counseling
   a) Cognitive Behavioral Therapy
   b) Stages of Change
   c) Motivational Interviewing
   d) Goal setting
      i. Encourage strategies to build confidence
      ii. Aid in building a supportive environment
   e) Self-monitoring
      i. Review and identify patterns (emotions/cognitions related to meals/snacks; events, thoughts about event, emotional response, behavioral response; negative self-talk, replacement thoughts)
      ii. Celebrate successes
   f) Problem solving
      i. Identify triggers
      ii. Brainstorm solutions
      iii. Select/implement strategy
      iv. Evaluate outcomes
   g) Social support
      i. Identify family/community support
      ii. Encourage family involvement
   h) Stress management
      i. Guidance on planning ahead
      ii. Use of positive self-talk
      iii. Setting realistic goals
      iv. Learning to deal appropriately with emotion-driven eating cravings
      v. Relaxation exercises
   i) Stimulus control
      i. Identify ways to modify the environment to eliminate triggers
   j) Relapse prevention
      i. Assess if external circumstances are contributing to lapse
      ii. Identify high-risk situation for slips
      iii. Analyze reactions to slips
      iv. Acquire knowledge and skills necessary to address high-risk situations
      v. Gain confidence in their ability to succeed in high-risk situations
   k) Rewards management

4. Coordination of Nutrition Care
   a) Interdisciplinary team meetings
   b) Meal support
   c) Referral to eating disorder support group (e.g., Overeaters Anonymous)
Step Four: Nutrition Monitoring and Evaluation (53)

1. Body weight
   a) Establish goal weight
   b) Determine
      i. Acceptable rate of weight gain in AN
      ii. Maintenance weight range in BN

Monitor weight
   i. Inpatient
      ▪ Daily, or every other day
      ▪ Obtain additional, random, afternoon, or evening weight if fluid loading is suspected
      ▪ Obtain urine specific gravity
   ii. Day treatment
      ▪ May vary, depending on diagnosis, age of patient, and treatment setting (e.g., daily, several times per week, once per week)
      ▪ Same time of day
      ▪ Same scale
      ▪ Obtain urine specific gravity
   iii. Outpatient
      ▪ Once every 1-2 week in early treatment, less frequently in mid- to late treatment
      ▪ Same time of day

2. Outpatient diet monitoring
   a) Anorexia nervosa
      i. Daily food record
         ▪ Food
         ▪ Fluid
         ▪ Fluid: caloric and non-caloric, alcohol
         ▪ Artificial sweeteners
         ▪ Eating behavior: time, place, how eaten, with whom
         ▪ Exercise
   b) Bulimia nervosa
      i. Daily food record
         ▪ Food
         ▪ Fluid: caloric and non-caloric, alcohol
         ▪ Artificial sweeteners
         ▪ Eating behavior: time, place, how eaten, with whom
         ▪ Emotions/feelings when eaten
         ▪ Foods eaten at a binge
         ▪ Time and method of purge
         ▪ Exercise
## Food List - Core Minimum Guide

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Minimum Daily Servings</th>
<th>What Is a Unit?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy</td>
<td>4 units (minimum)</td>
<td>1/2 c milk **, 1/2 c yogurt **, 1/4 c cottage cheese</td>
</tr>
<tr>
<td></td>
<td>(6 units for pregnant/breastfeeding woman and teens)</td>
<td>2 TBSP grated parmesan cheese, 1 oz cheese, 1 oz ricotta cheese, 1/4 c dry milk, instant</td>
</tr>
<tr>
<td></td>
<td>**best calcium source</td>
<td></td>
</tr>
<tr>
<td>Beans/Meat Protein</td>
<td>4 units (minimum)</td>
<td>1 oz chicken, turkey, fish, meat, 2 oz shrimp, scallops, crab, 1/4 c tuna or chicken salad</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/2 c cooked beans (legumes), 3 oz tofu, 2 egg whites, 1 whole egg, 2 rounded Tbsp peanut butter</td>
</tr>
<tr>
<td>Fruits and Vegetables</td>
<td>5 units (minimum)</td>
<td>average serving fruit (medium apple, Banana, orange, grapefruit half, 1/4 cantaloupe)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 c melon, 1/2 c fruit or vegetable juice, 1/2 c sliced fruit, 1/4 c dried fruit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/2 c cooked vegetables, 1 c raw vegetables</td>
</tr>
<tr>
<td>Grains (Starches)</td>
<td>9 units (minimum)</td>
<td>1 slice bread, 1/2 bagel, large pita, English muffin or hamburger bun</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/2 c cereal, hot or cold, 1/2 c rice, pasta, 1 small roll, biscuit, muffin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 to 6 small crackers, 2 rice cakes, 2 cups popcorn, 1/2 medium potato</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1/2 c green peas, corn, potato</td>
</tr>
<tr>
<td>Others</td>
<td>Use to round out meals and meet energy requirements</td>
<td>Fats-oils, butter, margarine, mayonnaise, salad dressings, lard, cream, avocado, bacon, cream cheese, olives</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sweets-sugar, honey, syrup, jam, jelly, candy, sugar gum</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Desserts-cake, pies, cookies, donuts, pastries</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Condiments-sauces, Beverages-sugar based, Alcohol</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Et Cetera!</td>
</tr>
</tbody>
</table>

If you are eating the minimum or less you may still be restricting; your plan should be above the minimum.

REFERENCES

28. Practice Applications: Topics of Professional Interest: What Should You Know about Mindful Eating and Intuitive
42. Lasslo-Meeks M. Update on Weight, Insulin and Glucose Consideration in Psychotropic Medications. SCAN's PULSE. 2003;22:7-10,12.
ADDITIONAL READING

Rather than providing an extensive list of books, which would probably be incomplete, I recommend that you order the Eating Disorders Bookshelf Catalog from Gurze Books at Box 2238, Carlsbad, CA, 92018, www.gurze.com. The catalog offers books, video, and audiotapes; subscriptions to Eating Disorders Review; and a listing of the national organizations; and advertisements for eating disorder programs around the U.S. You can ask for multiple copies of the catalog for distribution to clients and colleagues.

For an excellent bibliography listed according to subject matter, visit the website for the Council on Size & Weight Discrimination, Inc. at http://www.cswd.org/. Click on bibliography and select the subject area in which you are interested.

The following list of books is a recommended place to start:


JOURNALS: