

OVERVIEW OF EATING DISORDERS
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Categories of Disordered Eating:

- A high incidence of eating disorders and eating-related problems has been well documented among college-age women.
 - Up to 25% of female undergraduates when surveyed felt that their eating was out of control; 6% reported using laxatives or self-induced vomiting to control their weight. Female athletes also have a high prevalence of disordered eating behaviors.
 - A high incidence (35-45%) of diagnostically subthreshold problems concerning dissatisfaction with body image and weight preoccupation exists in this population as well.
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- A Scientific American poll conducted in 1996 on 382 subscribers showed that:
 - 2 out of 5 American doctors are dissatisfied with how much they weigh
 - 35% have been on a diet in the past year
 - more female doctors (59%) are dissatisfied than male doctors (35%)
 - more female doctors (48%) are on diets than male doctors (32%)

This may impact the way in which we approach food and weight issues with patients. Eric Sevareid, the news commentator once said, "The biggest business in America is not steel, automobiles or television. It is the manufacture, refinement and distribution of anxiety." When this anxiety is directed at self and promotes early dieting and a drive for thinness and body dissatisfaction, it becomes clear why eating disorders are so prevalent.

- The *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)* defines criteria for **anorexia nervosa** and **bulimia nervosa** but also defines **eating disorder not otherwise specified (NOS)**. Experienced health care providers in college health settings feel that a wider range of disordered eating behaviors can be targeted for intervention on college campuses if all three categories are used to define the populations at risk. See Table 1 comparing key features of these three diagnostic categories.

- A separate clinical syndrome known as the **female athlete triad (amenorrhea, eating disorder, and osteoporosis)** in a female athlete in excellent physical condition has been recognized. In this syndrome, female athletes with eating disorders develop secondary amenorrhea from their hypoestrogenic state. Osteopenia or significantly reduced bone mass occurs resulting in an increased risk of stress fractures. Approaches to therapy in these young women include encouraging weight gain of sufficient amount to induce resumption of normal menses. Oral contraceptives have also been used to counter the hypoestrogenic state. Controlled, double-blind studies of oral contraceptive therapy in this population have not yet been done to assess the effects of oral contraceptives on bone density. One retrospective study of amenorrhea in runners compared hormonal therapy with placebo over 24-30 months. Those receiving therapy showed significant increases in bone density while those in the control group showed nonsignificant decreases of less than 2.5%.¹ Other studies have shown that athletes on oral contraceptives have less risk of stress fracture.
- Another clinical syndrome known as **night-eating syndrome** has been described. In these individuals:
 - **There is no appetite for breakfast**
 - **50% or more of food intake occurs after 7 pm**
 - **subjects have trouble getting to sleep or staying asleep**
- **Rumination syndrome** is characterized by repetitive regurgitation of small amounts of food from the stomach. The food is then partially or completely rechewed, reswallowed, or expelled. This syndrome may occur in mentally retarded individuals but also has been described in adults of normal intelligence and in association with **bulimia nervosa**. The important difference between ruminators who have bulimia and those who do not is that “bulimics” tend to expel rather than reswallow their food and may induce self-vomiting by stimulation of the hypopharynx with their finger. Ruminators effortlessly regurgitate within minutes of a meal.
- **Compulsive overeating syndrome** is found in individuals who eat even when they are not hungry and who eat food which they do not particularly want or like. The medical complications of this disorder include hypertension, high cholesterol levels, heart disease and diabetes.

Screening Questions Which May Be Helpful in Identifying an Eating Disorder

- What is the most you have ever weighed? When?
- What is the least you have ever weighed? When?
- What do you think you should weigh?
- Many women have tried different ways to control their weight. What have you tried?
- Have you every had a binge, or “pig out”? What makes up a binge? How much, how often? What ends the binge? Any triggers that you can identify that lead to a binge?
- Have you ever made yourself vomit? How many times per day? Any relation to meals? How long has this been going on?
- Have you every used laxatives, diuretics, diet pills, caffeine to control your weight? How much, how often, and what time frame?
- What do you do for exercise? How much, how often? How stressed do you feel if you miss a workout?
- Can you tell me what you ate in the past 24 hours? How many bites of _____?

Role of the Primary Care Provider

- Early identification of the patient with eating disorders.
- Member of the treatment team with specific role of medical monitoring
- Other members of the team to include:
 - Dietician
 - Counselor or Therapist
 - Psychiatrist
 - +/- Exercise Physiologist or Fitness Trainer

Therapeutic Modalities

- Frequent clinic visits with medical monitoring
- Various psychotherapeutic modalities including:
 - Individual psychotherapy
 - Family psychotherapy
 - Supportive, psychoeducational, cognitive-behavioral, and insight-oriented therapies
- Psychiatric hospitalization
- Residential treatment programs
- Halfway houses
- Day-hospital treatment programs
- Psychotropic medication:
 - SSRI's are more successful in treating bulimia nervosa than anorexia nervosa.
 - Comorbid disorders such as depression, anxiety and obsessive-compulsive disorder should be appropriately treated with medication

Indications for Hospitalization in Eating Disorders

Insurance companies have become universally reluctant to pay for in-patient treatment for eating disorders. Therefore, most patients are treated as outpatients. There are however criteria for hospitalization:

- Severe malnutrition (weight < 75% of ideal body weight)
- Dehydration
- Electrolyte imbalances (hypokalemia, hypophosphatemia)
- EKG abnormalities
- Sinus bradycardia (< 50 beats per minute)
- Prolonged corrected QT
- Arrhythmias
- Physiologic instability
- Hypotension
- Hypothermia
- Bradycardia
- Orthostatic changes on pulse or BP
- Syncope
- Arrested growth and development
- Failure of outpatient management
- Intractable vomiting, bingeing or purging
- Acute food refusal
- Precipitous weight loss in a short period of time
- Suicidal ideation or acute psychosis
- Comorbid diagnosis interfering with treatment of the eating disorder (major depression, obsessive compulsive disorder, severe family dysfunction)

Prognosis

- Varies:
- Anorexia Nervosa
 - 50% recover to a normal weight
 - 25% remain thin but not dangerously so
 - 20% remain emaciated
 - 5-10% either become overweight or die

- **Bulimia Nervosa**
 - Overall, 80% can be expected to make some improvement
 - 30% relapse
 - 40% remain chronically symptomatic
 - SSRI's may change these statistics

National Organizations with Referral and Treatment Information for Eating Disorders

- **Academy for Eating Disorders**

**Montefiore Medical School—Adolescent Medicine
111 E 210th St
Bronx, NY 10467
Phone 718-920-6782**

- **American Anorexia Bulimia Association**

**165 W 46th ST.
Suite 1108
New York, NY 10036
Phone 212-575-6200**

- **Anorexia Nervosa and Related Eating Disorders**

**Box 5102
Eugene, Oregon 97405
Phone 541-344-1144
Web site: www.anred.com**

- **National Association of Anorexia Nervosa and Associated Disorders**

**Box 7
Highland Park, Illinois 60035
Phone 847-831-3438**

- **National Eating Disorders Organization**

**6655 S. Yale Ave
Tulsa, OK 74136
Phone 918-481-4044**

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Schwitzer A, Bergholz K, Dore T, and Salimi L. Eating Disorders Among College Women: Prevention, Education, and Treatment Responses, *J Am Coll Health*, 1998;46:199-207.

Table 1: Key Features of Diagnoses of Anorexia Nervosa, Bulimia Nervosa, and Eating Disorders Not Otherwise Specified¹

Feature	Anorexia nervosa	Bulimia Nervosa	Eating Disorders Not Otherwise Specified
Primary feature	Refusal to maintain normal weight	Binge eating followed by compensatory behaviors	Disturbance in eating/weight management behavior. Criteria not met for specific disorder
Minimum duration/severity	Maintains < 85% of expected body weight Absence of 3 consecutive menses	Binging and compensatory behavior at least 2x weekly Present for 3 months	Symptoms cause impairment in daily functioning Symptoms cause significant distress
Associated features	Intense fear of gaining weight/becoming fat Disturbance of	Self-evaluation unduly influenced by body image	Rumination about eating and weight management Fragile self-

	body image		image Interpersonal concerns Other adjustment problems
Subtypes	Restricting Binging/purging	Purging Nonpurging	Various

¹Schwitzer A et.al. Eating Disorders Among College Women: Prevention, Education, and Treatment Responses, *J Am Coll Health*, 1998;46:201.

¹ Cumming DC. Exercise-associated amenorrhea, low bone density, and estrogen replacement therapy. *Arch Intern Med* 1996;156:2193-95.