Objectives

- At the end of this presentation, participants will be able to:
  - Diagnose eating disorders (anorexia nervosa, bulimia nervosa, binge eating disorder) utilizing the new DSM-5 diagnostic criteria.
  - Discuss ways to assess eating disorder behavior and severity in primary care.
  - Identify the role of the physician in eating disorder management.
How comfortable are you diagnosing eating disorders?

1. Very
2. Moderately
3. Somewhat
4. Not at all

How comfortable are you treating eating disorders?

1. Very
2. Moderately
3. Somewhat
4. Not at all
Did you know…?

More people suffer from eating disorders than Alzheimer’s, Autism, Schizophrenia combined.


Did you know…?

30 Million People
Did you know…?

Prevalence of Eating Disorders

30 Million People

33% Women
67% Men

Did you know…?

Eating Disorder Prevalence

- Non-White Hispanic
- African American
- Asian
- Hispanic

(Hudson et al., 2007; Wade et al., 2011).
Did you know…?

Mortality Rate by Eating Disorder

<table>
<thead>
<tr>
<th>Eating Disorder</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anorexia</td>
<td>5.86</td>
</tr>
<tr>
<td>Bulimia</td>
<td>1.93</td>
</tr>
<tr>
<td>Other</td>
<td>1.92</td>
</tr>
</tbody>
</table>

(Arcelus, Mitchell, Wales, & Nielsen, 2011).

Did you know…?

Did you know…?
Eating Disorders in Primary Practice: Why They Get Overlooked

• Don’t ask

• Weight stigma
  – Overweight people are lazy, to blame
  – Weight loss is validated

• Insufficient knowledge/comfort

• Don’t want responsibility

• Don’t recognize signs/sxs

Outline

• Diagnostic Criteria

• Screening/Detection

• Treatment
Anorexia Nervosa
NEW DSM-5 Criteria

1) Energy restriction relative to requirements
   → Low weight for age, sex, health, development

2) Intense fear of weight gain/fat
   -AND/OR-
   Persistent behavior that interferes with weight gain

3) Undue influence of body shape/weight on self-eval
   -OR-
   Persistent denial of seriousness of low weight

Anorexia Nervosa
NEW DSM-5 Criteria

• Subtypes:
  – Restricting Type (F50.01)
  – Binge-eating/Purging Type (F50.02)

• Specifiers
  – Mild: BMI > 17
  – Moderate: BMI 16-16.99
  – Extreme: BMI < 15
Bulimia Nervosa
NEW DSM-5 Criteria

- Recurrent episodes of binge eating
- Inappropriate compensatory behaviors- including exercise
- Occurs at least **ONCE** a week for 3 months
- Self evaluation based on body shape and weight

Bulimia Nervosa
NEW DSM-5 Criteria

- New specifiers
  - Mild 1-3 episodes/week
  - Moderate 4-7 episodes/week
  - Severe 8-13 episodes/week
  - Extreme 14+ episodes/week
Binge Eating

- Frequent episodes of eating large quantities of food in short periods of time.
- Feeling out of control.
- Occurs 1/wk for 3 mo

- Behavioral indicators (3)
  - Eating rapidly
  - Eating until uncomfortably full
  - Eating when not hungry
  - Eating in secret/alone
  - Feeling disgusted, depressed, guilty

How do I detect them?
Assessment in Primary Practice: Common Presentation

**Physical**
- Significant weight change/fluctuation hx
- Amenorrhea
- Low BP and HR
- Lanugo
- Calluses on knuckles
- Other physical complications

**Psychological**
- Low mood or depression
- Anxiety/irritability
- Obsessional symptoms, particularly related to food and weight
- Difficulty concentrating
- Rigid thinking
- Feel out of control
Assessment in Primary Practice: Common Presentation

**Behavioral**
- Bingeing
- Excessive exercise
- Calorie counting
- Hypo or hypersomnia
- Refusal to eat meals/eat in presence of others
- Food rituals or hoarding
- Night eating

**Social**
- School or work problems
- Problems in the family and/or with relationships
- Legal problems or other police contact
Assessment in Primary Practice: Physical Examination- Food Restriction

• **Reproductive function**: loss of menstruation, fertility and pregnancy difficulties.

• **Musculoskeletal**: myopathy particularly of the limb girdle muscles, pathological fractures, teeth problems.

• **Cardiovascular**: palpitations, syncope, postural & resting hypotension, bradycardia.

• **Renal**: nocturia, renal stones, acute failure.

Assessment in Primary Practice: Physical Examination- Food Restriction

• **Skin and hair**: loss of head hair, increase in body hair, dry skin, acrocyanosis, chilblains.

• **Metabolic**: hypoglycemia, liver dysfunction, hypercholesterolemia, hypothermia.

• **Gastrointestinal**: delayed gastric emptying, constipation, bloating.

• **Central nervous system**: poor concentration, difficulty making complex thoughts.
Assessment in Primary Practice: Physical Examination-
Bingeing, Vomiting, Laxative Abuse

- **Gastrointestinal tracts:** teeth, salivary gland hypertrophy, upper and lower intestinal tract bleeding, abdominal distension, constipation.

- **Renal:** edema, dehydration, stones, failure.

- **Cardiovascular:** dysrhythmias, postural hypotension, high blood pressure

Assessment in Primary Practice: Physical Examination-
Bingeing, Vomiting, Laxative Abuse

- **Central nervous system:** tetany, seizures.

- **Metabolic:** dehydration, hypokalemia, hyponatremia, hypercholesterolemia.

- **Drug effects:** caffeine, weight loss pills, stimulants or thermogenics, amphetamines and ecstasy can be abused.
Assessment in Primary Practice

• SCOFF Questionnaire (Morgan & Lacey, 2000)
  – Do you ever make yourself Sick because you feel uncomfortably full?
  – Do you worry you have lost Control over how much you eat?
  – Do you believe yourself to be fat when Others say you are too thin?
  – Have you recently lost/gained more than Fourteen pounds in a three month period?
  – Would you say that Food dominates your life?

Assessment in Primary Practice
How to Ask

• Ask permission to discuss eating habits

• Assess motivation to change eating habits
  – Importance of change to pt
  – Pt confidence
  – Pros/Cons current habits
  – Pros/Cons of change
Assessment in Primary Practice
What to Ask

**Eating Behaviors**
- Eating
  - When
  - How often
  - How much
  - What
  - With whom
  - Perceived control

**Weight Management**
- Weight loss
  - What activities
  - How often
  - How much

---

**Assessment in Primary Practice**
What to Ask

- Behavior hx
- Family hx
- What informs it?
- What caused it?
- What sustains it?
Assessment in Primary Practice: What Else to Say

• Focus on feelings and relationships

• Tell them you are concerned about their health

• Do not comment on how they look

• Make sure you do not convey any fat prejudice

• Avoid power struggles about eating

• Avoid placing shame, blame, or guilt

How would I **ASK** those questions?

How would I **CONVEY** my concern?
Assessment in Primary Practice: Action Plan

• Assess suicidality and self-harm
• Express concern
• Do not judge
• Patient AND family may be in denial
• Offer brief education on adequate nutrition and health habits
• DO NOT BLAME

Treatment in Primary Practice: Action Plan

• Specific plan
  – Immediate hospitalization for weight restoration (if necessary)
  – Food diary (time, food eaten, compensatory behaviors, related feelings) follow up in 1-1 ½ weeks
  – Monitor intake, purging behaviors, food hoarding, mood, sleep patterns
  – Medication for depression or anxiety
  – Follow-up with patient and family and monitor physiological and psychological sxs
Treatment in Primary Practice: Action Plan

- Referral
  - Mental health practitioner
  - Specialized treatment center
  - NOT support groups

PCP Role in Treatment

- Medications for EDs
  - Fluoxetine 60 mg/day for bulimia*
  - Topiramate or Orlistat for binge eating
  - Olanzapine in trials for anorexia

- Treat co-occurring psychological concerns
  - Other SSRIs for comorbid depression or anxiety
  - NO bupropion

- Monitor
  - Weight and nutrition
  - Medical complications
Physiological Symptoms to Monitor

<table>
<thead>
<tr>
<th>Anorexia</th>
<th>Bulimia</th>
<th>Binge Eating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypokalemia</td>
<td>Hypokalemia</td>
<td>Diabetes Mellitus</td>
</tr>
<tr>
<td>Hypophosphatemia</td>
<td>Hypomagnesemia</td>
<td>Gallbladder Disease</td>
</tr>
<tr>
<td>Hypomagnesemia</td>
<td>Renal Function</td>
<td>High Blood Pressure</td>
</tr>
<tr>
<td>Renal Function</td>
<td>Metabolic Alkalosis</td>
<td>High Cholesterol</td>
</tr>
<tr>
<td>Bradycardia &amp; Arrhythmias</td>
<td>Callouses</td>
<td>Heart Disease</td>
</tr>
<tr>
<td>Metabolic Alkalosis</td>
<td>Dental Caries</td>
<td>Limited ability to lose weight</td>
</tr>
<tr>
<td>Osteopenia</td>
<td>Enamel Erosion</td>
<td></td>
</tr>
</tbody>
</table>

Important Facts

• NOT A CHOICE

• NOT ABOUT FOOD

• Serious, life threatening biopsychosocial d/o

• Investigate all weight loss, gain, and fluctuations

• Emphasize healthy lifestyle NOT weight only
Kansas Resources

• Residential Treatment: Thalia House

Co-Director: Brooke Wesley, LSCSW
Co-Director: Amy Sullivan, MC, RD, LD

5301 Norwood, Fairway, KS
Office: 888-913-1428

Others in KS City, Overland Park, Olathe, Lawrence

Kansas Resources

• Outpatient:
  – Beth Hartman McGilley, Ph.D. (316) 630-9444
  – Kelly Walker, MS, LCMFT (316) 648-9592
  – Melissa Hopper, Psy.D. (316) 683-4083
  – Kristin Goodheart, Ph.D. (316) 683-4083
Resources

• National Eating Disorders Association
  – www.nationaleatingdisorders.com

• Academy for Eating Disorders
  – http://www.aedweb.org/

• National Association of Anorexia Nervosa and Associated Disorders
  – www.anad.org

• National Association for Males with Eating Disorders
  – http://namedinc.org/

• Something Fishy
  – http://www.something-fishy.org/

Resources

• **National Treatment Referrals**
  – Eating Disorder Referral and Information Center
    • http://www.edreferral.com/

  – The Women’s Center for Healthy Living
    • http://www.edtreatmentcenters.com/
    • 1-800-941-5313 (24-hr crisis hotline)
References


- Eating Disorders: Critical Points for Early Recognition and Medical Risk Management in the Care of Individuals with Eating Disorders (2nd Ed). Academy for Eating Disorders. 2012. Deerfield, IL: AED.


OLD DSM-IV Criteria:
Anorexia Nervosa

1) Weight <85% of expected

2) Intense fear of gaining weight/becoming fat

3) Self evaluation based on body shape and weight or denial of seriousness of weight loss

4) Amenorrhea

• Subtypes:
  – Restricting
  – Binge-Eating/Purging Type
Old DSM-IV Criteria
Bulimia Nervosa

1) Recurrent episodes of binge eating
2) Inappropriate compensatory behaviors
3) Occurs at least twice a week for 3 months
4) Self evaluation based on body shape and weight
5) Weight > 85% of expected

• Subtypes:
  • Purging Type
  • Nonpurging Type

Local Resources-Detailed Info

Kelly Walker, MS, LCMFT
Walker Counseling Services, LLC
1660 N. Tyler Road, Suite A
Wichita, KS 67212
316-648-9592
mftwalker@gmail.com

Melissa Hopper, Psy.D.
hopperm@ccc.org
Kristin Goodheart, Ph.D.
8100 E. 22nd St. N.
Building 800, Suite 100
Wichita, KS 67226
316-683-4083

Beth Hartman McGilley, Ph.D.
9342 E Central, Suite D
Wichita Kansas 67206-2555
316-630-9444
Critical Points for Early Recognition and Medical Risk Management in the Care of Individuals with Eating Disorders
Disclaimer: This document, created by the Academy for Eating Disorders’ Medical Care Standards Task Force, is intended as a resource to promote recognition and prevention of medical morbidity and mortality associated with eating disorders. It is not a comprehensive clinical guide. Every attempt was made to provide information based on the best available research and current best practices.

For further resources, practice guidelines and bibliography visit: www.aedweb.org and www.aedweb.org/Medical_Care_Standards

Table of Contents

Key Guidelines 4
Eating Disorders 4
Important Facts about Eating Disorders 5
Presenting Signs and Symptoms 6
Early Recognition 7
A Comprehensive Assessment 8
Refeeding Syndrome 12
Goals of Treatment 14
Timely Interventions 15
Ongoing Management 16
About the Academy for Eating Disorders 17

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Key Guidelines

Eating disorders (EDs) are serious mental illnesses with significant, life-threatening medical and psychiatric morbidity and mortality, regardless of an individual’s weight. Anorexia Nervosa (AN), in particular, has the highest mortality rate of any psychiatric disorder. Risk of premature death is 6-12 times higher in women with AN as compared to the general population, adjusting for age.

Early recognition and timely intervention, based on a developmentally appropriate, evidence-based, multidisciplinary team approach (medical, psychological & nutritional), is the ideal standard of care, wherever possible. Members of the multidisciplinary team may vary and will depend upon the needs of the patient and the availability of these team members in the patient’s community. In communities where resources are lacking, clinicians, therapists, and dietitians, are encouraged to consult with the Academy for Eating Disorders (AED) and/or ED experts in their respective fields of practice.

Eating Disorders

For the purpose of this document, eating disorders (EDs) include:

- 1. Anorexia nervosa (AN), restrictive and binge/purge subtypes
- 2. Bulimia Nervosa (BN), purging and non-purging types
- 3. Eating Disorders Not Otherwise Specified (EDNOS), including Binge Eating Disorder (BED)
- Consult www.aed.org or the current DSM or ICD-10 for full description.

Important Facts about Eating Disorders

- Eating disorders are serious disorders with life-threatening physical and psychological complications.
- In addition to girls and women, EDs can affect boys and men; children, adolescents and adults; people from all ethnicities and socioeconomic backgrounds; and people with a variety of body shapes, weights and sizes.
- Weight is not the only clinical marker of an ED. People who are at normal weight can have EDs.
- It is important to remember that EDs do not only affect females at low weight. All instances of precipitous weight loss in otherwise healthy individuals should be investigated for the possibility of an ED, including post-bariatric surgery patients. In addition, rapid weight gain or weight fluctuations can be a potential marker of an ED.
- Individuals at weights above their natural weight range may not be getting proper nutrition and patients within their natural weight range may be engaging in unhealthy weight control practices.
- In children and adolescents, failure to gain expected weight or height, and/or delayed/interrupted pubertal development, should be investigated for the possibility of an ED.
- The medical consequences of EDs can go unrecognized, even by experienced clinicians.
- Eating disorders (including BED) can be associated with serious medical complications. Eating disorders can be associated with significant compromise in every organ system of the body, including the cardiovascular, gastrointestinal, endocrine, dermatological, hematological, skeletal, and central nervous system.
Presenting Signs and Symptoms

Individuals with EDs may present in a variety of ways. In addition to the cognitive and behavioral signs that characterize EDs, the following are possible physical signs and symptoms that can occur in patients with an ED as a consequence of nutritional deficiencies, binge-eating, and inappropriate compensatory behaviors, such as purging. However, an ED may occur without obvious physical signs or symptoms.

GENERAL
- Marked weight loss, gain or fluctuations
- Weight loss, weight maintenance or failure to gain expected weight in a child and adolescent who is still growing and developing
- Cold intolerance
- Weakness
- Fatigue or lethargy
- Dizziness
- Syncope
- Hot flashes, sweating episodes

GASTROINTESTINAL
- Epigastric discomfort
- Early satiety, delayed gastric emptying
- Gastroesophageal reflux
- Hematemesis
- Hemorrhoids and rectal prolapse
- Constipation

ORAL AND DENTAL
- Oral trauma/lacerations
- Dental erosion and dental caries
- Perimolysis
- Parotid enlargement

CARDIORESPIRATORY
- Chest pain
- Heart palpitations
- Arrhythmias
- Shortness of breath
- Edema

ENDOCRINE
- Amenorrhea or irregular menses
- Loss of libido
- Low bone mineral density and increased risk for bone fractures and osteoporosis
- Infertility

NEUROPSYCHIATRIC
- Seizures
- Memory loss/Poor concentration
- Insomnia
- Depression/Angst/Obsessive behavior
- Self-harm
- Suicidal ideation/suicide attempt

DERMATOLOGIC
- Lanugo hair
- Hair loss
- Yellowish discoloration of skin
- Callus or scars on the dorsum of the hand (Russell’s sign)
- Poor healing

Early Recognition

Consider evaluating an individual for an ED who presents with any of the following:

- Precipitous weight loss/gain
- Weight loss or failure to gain expected weight/height in a child and adolescent who is still growing and developing
- Substantial weight fluctuations
- Electrolyte abnormalities (with or without ECG changes), especially hypokalemia, hypochloremia, or elevated CO2. High normal CO2 in the presence of low normal chloride and/or urine pH of 8.0 – 8.5 can indicate recurrent vomiting. Hypoglycemia may accompany such electrolyte changes.
- Bradycardia
- Amenorrhea or menstrual irregularities
- Unexplained infertility
- Excessive exercise or involvement in extreme physical training
- Constipation in the setting of other inappropriate dieting and/or weight loss promoting behaviors
- Type 1 diabetes mellitus and unexplained weight loss and/or poor metabolic control or diabetic ketoacidosis (DKA). These patients are at increased risk of developing sub-threshold and full syndrome EDs. Intentionally changing insulin doses (under-dosing or omission) will lead to weight loss, poor glycemic control (higher hemoglobin A1c), hypoglycemia/hyperglycemia, DKA, and acceleration of diabetic complications.
- A history of using one or more compensatory behaviors to influence weight after eating or perceived overeating or binge eating, such as self-induced vomiting, dieting, fasting or excessive exercise
- A history of using/abusing appetite suppressants, excessive caffeine, diuretics, laxatives, enemas, ipecac, excessive hot or cold fluids, artificial sweeteners, sugar-free gum, prescription medications (i.e., insulin, thyroid medications), psychostimulants, street drugs, or a variety of complementary and alternative supplements.
Acute malnutrition is a medical emergency

Individuals with continued restrictive eating behaviors, binge eating or purging despite efforts to redirect their behavior require immediate intervention. Acute malnutrition is a medical emergency. Malnutrition can occur at any body weight, not just at a low weight.

A Comprehensive Assessment

Complete History to Include…

Assess:

• Rate and amount of weight loss/change
• Nutritional status
• Methods of weight control

Review:

• Compensatory behaviors (vomiting, dieting, exercise, insulin misuse, and/or use of diet pills, over-the-counter supplements, laxatives, ipecac, diuretics etc.)
• Dietary intake and exercise
• Menstrual history in females (hormone replacement therapy including oral contraceptive pills)
• Comprehensive growth and development history, temperament, & personality traits

• Family history including symptoms or diagnosis of EDs, obesity, mood & anxiety disorders, alcohol and substance use disorders
• Psychiatric history including symptoms of mood disorders and anxiety disorders

Physical examination to include…

• Supine and standing heart rate and blood pressure
• Respiratory rate
• Oral temperature (looking for hypothermia: body temperature < 96°F/35.6°C).
• Measurement of height, weight, and determination of body mass index (BMI); record weight, height and BMI on growth charts for children and adolescents, noting changes from previous height(s) and weight(s) measurements.

Initial laboratory Evaluation

• The laboratory and imaging studies recommended for consideration in an initial evaluation of a patient with an ED, along with the corresponding abnormalities that can be seen in patients with EDs, are outlined in the following chart.
### Potential abnormal findings in a patient with an eating disorder

<table>
<thead>
<tr>
<th>Laboratory Studies</th>
<th>Potential abnormal findings in a patient with an eating disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete blood count</td>
<td>Leukopenia, anemia, or thrombocytopenia</td>
</tr>
<tr>
<td>Comprehensive serum metabolic profile, other electrolytes and enzymes</td>
<td>Glucose: ↓ (poor nutrition), ↑ (insulin omission) Sodium: ↓ (water loading or laxatives) Potassium: ↓ (vomiting, laxatives, diuretics, refeeding) Chloride: ↓ (vomiting), ↑ (laxatives) Blood bicarbonate: ↑ (vomiting), ↓ (laxatives) Blood urea nitrogen: ↑ (dehydration) Creatinine: ↑ (dehydration, renal dysfunction), (poor muscle mass). Normal may be “relatively elevated” given low muscle mass. Calcium: slightly ↓ (poor nutrition at the expense of bone) Phosphate: ↓ (poor nutrition or refeeding) Magnesium: ↓ (poor nutrition, laxatives, refeeding) Total protein/albumin: ↑ (in early malnutrition at the expense of muscle mass), ↓ (in later malnutrition) Total bilirubin: ↑ (liver dysfunction), ↓ (poor RBC mass) Aspartate aminotransaminase (AST), Alanine aminotransaminase (ALT): ↑ (liver dysfunction) Amylase: ↑ (vomiting, pancreatitis) Lipase: ↑ (pancreatitis)</td>
</tr>
<tr>
<td>Thyroid function tests</td>
<td>Low to normal thyrotropin (TSH), normal or slightly low thyroxine (T4) (sick euthyroid syndrome).</td>
</tr>
<tr>
<td>Gonadotropins and sex steroids</td>
<td>Low luteinizing hormone (LH) and follicle-stimulating hormone (FSH). Low estradiol in females, low testosterone in males.</td>
</tr>
<tr>
<td>Pregnancy test of women in childbearing years</td>
<td>Pregnant test of women in childbearing years</td>
</tr>
<tr>
<td>Lipid panel</td>
<td>This is not recommended as an initial laboratory test since cholesterol may be elevated in early malnutrition or low in advanced malnutrition.</td>
</tr>
<tr>
<td>Imaging Studies</td>
<td>Bone mineral density study</td>
</tr>
<tr>
<td>Bone mineral density study</td>
<td>Patients with EDs are at risk of low bone mineral density (BMD). There is no evidence that hormone replacement therapy (estrogen/progesterone in females or testosterone in males) improves BMD. Nutritional rehabilitation, weight recovery, and normalization of endogenous sex steroid production are the treatments of choice. A common technique for measuring BMD is dual energy x-ray absorptiometry (DXA), recommended in patients with amenorrhea for 6 months or longer.</td>
</tr>
<tr>
<td>Other Tests</td>
<td>Electrocardiogram (ECG)</td>
</tr>
<tr>
<td>Electrocardiogram (ECG)</td>
<td>Bradycardia or other arrhythmias, low-voltage changes, prolonged QTc interval, T-wave inversions, and occasional ST-segment depression.</td>
</tr>
</tbody>
</table>
Refeeding Syndrome

Refeeding syndrome describes a potentially fatal shift of fluid and electrolytes that can occur when refeeding (orally, enterally, or parenterally) a malnourished patient. Patients with refeeding syndrome may have a non-specific clinical presentation and therefore diagnosing this syndrome can be challenging. The serious consequences of refeeding syndrome include cardiac and/or respiratory failure, gastrointestinal problems, delirium and, in some cases, death. Refeeding syndrome is a potentially fatal condition requiring specialized care on an inpatient unit.

Risk factors for refeeding syndrome include:

- Patients who are chronically undernourished and those who have had little or no energy intake for more than 10 days.
- Patients with rapid or profound weight loss, including those patients who present at a normal weight after weight loss.
- Patients with anorexia nervosa.
- Patients with EDs who are malnourished, especially if there is significant alcohol intake.
- Patients with obesity and significant weight loss, including after bariatric surgery.
- Patients with prolonged fasting or low energy diet.
- Patients with a history of diuretic, laxative or insulin misuse.
- Patients with abnormal electrolytes, particularly hypophosphatemia, prior to refeeding.

Ways to Prevent Refeeding Syndrome in patients with an eating disorder

- Be informed about refeeding syndrome and aware of those patients who are potentially at risk.
- Be aware that refeeding syndrome can occur in patients of any age.
- Understand that those patients at risk for refeeding syndrome should be treated by physicians with expertise or special training in the area of EDs.
- Use an inpatient medical unit to treat and monitor patients who may have, or are at risk for, refeeding syndrome. Refeeding syndrome is an important cause of morbidity and mortality in malnourished patients with EDs.
- Refeed slowly, adjusting to the age, developmental stage, and degree of malnourishment.
- While treating a patient on an inpatient unit, monitor fluid replacement to avoid overload and check serum electrolytes, glucose, magnesium, and phosphorus prior to and closely during refeeding. Serum phosphorus levels are at their lowest point during the first week of refeeding in patients who are hospitalized.
- For those patients with electrolyte deficits, correct electrolyte and fluid imbalance alongside feeding. It is not necessary to correct fluid and electrolyte imbalance before feeding. With careful monitoring, this can be safely achieved simultaneously. For those patients who do not present with electrolyte deficits, carefully monitor on an inpatient unit as electrolyte abnormalities may occur with refeeding.
- Monitor vital signs and cardiac and mental status of all patients during refeeding.
**Timely Interventions**

1. **Patients with EDs may not recognize that they are ill and/or they may be ambivalent about accepting treatment.**  
   This is a symptom of their illness. In addition, patients may minimize, rationalize, or hide ED symptoms and/or behaviors. Their persuasive rationality and competence in other areas of life can disguise the severity of their illness. Outside support and assistance with decision-making will likely be necessary regardless of age.

2. **Parents/guardians are the frontline help-seekers for children and adolescents with EDs.**  
   Trust their concerns. Even a single consultation about a child’s eating behavior or weight/shape concerns is a strong predictor of the presence or potential development of an ED.

3. **Help families understand that they did not cause the illness; neither did their child/family member choose to have it.**  
   This recognition facilitates acceptance of the diagnosis, treatment, referral, interventions, and minimizes undue stigma associated with having the illness.

4. **Monitor physical health including vital signs and laboratory tests.**  
   The overall observation of physical health in a patient with an ED should include regular monitoring of the orthostatic heart rate and blood pressure (lying pulse and blood pressure followed by standing pulse and BP). Results should be interpreted in the context of physiological adaptation to malnutrition and purging behavior. Laboratory test results can be normal even in the presence of a life-threatening ED. Minor abnormalities may indicate that compensatory mechanisms have reached critical limits.

   Low weight patients or those patients who have significant weight loss may present with bradycardia (heart rate < 50 beats per minute). This should not be automatically attributed to an athlete’s heart, even if the patient is an athlete.

5. **Always assess for psychiatric risk, including suicidal and self-harm thoughts, plans and/or intent.**  
   Up to 1/3 of deaths related to EDs are due to suicide.

---

**Underfeeding**

Underfeeding can lead to further weight loss and has been reported to be fatal in seriously malnourished patients.

**Ways to prevent Underfeeding**

- Avoid underfeeding caused by implementing overly cautious rates of refeeding.
- Frequently (12-24 hourly) reassess and increase calories as soon as it is deemed safe in patients who are hospitalized.
- Review electrolytes daily in the initial stages of refeeding.

**Goals of treatment**

- Nutritional rehabilitation
- Weight restoration
- Medical stabilization and prevention of serious medical complications and death
- Resumption of menses (where appropriate)
- Cessation of binge eating and/or purging behaviors
- Cessation of eating disordered ideation including body image disturbance and dissatisfaction
- Restore meal patterns that promote health and social connections
- Re-establish social engagement

Full resolution of symptoms may take an extended period of time. Eating Disorders are not merely fads, phases, or lifestyle choices. People do not choose to have EDs, even though they may voluntarily engage in risk-associated behaviors such as dieting and/or exercise that may precipitate an ED.
Ongoing Management

Evidence-based treatment delivered by health professionals with expertise in the care of patients with ED is mandatory. Optimal care includes a multidisciplinary team approach by ED specialists including medical, psychological, nutritional, and psychopharmacologic services. Families & spouses should be included whenever possible.

Referral by primary providers is the most likely reason families/patients seek expert care. A detailed assessment and referral to an expert can, therefore, ensure the best treatment outcome for the patient.

Nutritional rehabilitation, weight restoration & stabilization, complete physiologic restoration, management of refeeding complications, and interruption of purging/compensatory behaviors should be the immediate goals of treatment for all patients with EDs. Additional psychological and other therapeutic goals can be addressed in parallel when possible.

Achievement of an individual’s appropriate healthy weight will improve the physical, psychological, social, and emotional functioning of that patient.

Failure to fully restore weight correlates with worse outcomes, and maintenance of the weight restored strongly correlates with a good outcome. However, there is danger in thinking that a person with an ED is recovered once physical health and weight are restored. Distorted body image and/or ED thoughts may persist despite weight restoration and will likely require longer-term therapy.

For references and further information about the diagnosis and treatment of EDs visit: www.aedweb.org and www.aedweb.org/Medical_Care_Standards.

About the Academy for Eating Disorders (AED)

The AED is a global multidisciplinary professional association committed to leadership in promoting EDs research, education, treatment, and prevention.

The AED provides cutting-edge professional training and education, inspires new developments in the field of EDs, and is the international source for state-of-the-art information on EDs.

Join the AED

Become a member of a global community dedicated to ED research, treatment, education, and prevention. Join online at: www.aedweb.org

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