

# Eating Disorders & the Primary Care Physician

by Michaela M. Voss, MD



**Early detection through screening and high suspicion is needed by PCPs to prevent hospitalization and assist with establishing an appropriate treatment team.**



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## Abstract

**Eating disorder is a term to describe a wide variety of maladaptive eating patterns and becoming more prominent in today's culture. The primary care provider (PCP) plays a key role in detection of eating disorders. Medical management by an informed provider is an essential part of the treatment team and focuses on preventing acute and chronic physical sequela of the disease. There are various levels of care offered, with family-based approaches showing the best outcomes.**

## Defining Eating Disorders

The Diagnostic and Statistical Manual of Mental Disorders, 5<sup>th</sup> edition (DSM-V), defines an eating disorder as having three components:<sup>1</sup>

1. A persistent disturbance in eating or eating-related behaviors;
2. Altered consumption or absorption of food;
3. Significant impairment in physical or psychosocial health.

There are two major groups of eating disorders: those that result from altered body image and those that result from other factors such as sensory disturbances, medical co-morbidities or nutrient deficiencies (Table 1).

The disorders that are not a result of body image disturbance typically present at younger ages

and resolution tends to occur after defining and treating the underlying cause of abnormal eating behaviors. This article will focus on disorders with body image disturbances, which most commonly present in adolescents and young adults.<sup>2</sup> Body image focused eating disorders comprise of Restrictive Eating Disorders (REDOs) and Non-Restrictive Eating Disorders (NREDOs).

## Restrictive Eating Disorders

For Restrictive Eating Disorders (Anorexia Nervosa and Atypical Anorexia Nervosa), there is an intentional deficit between energy intake and expenditure for the purpose of body alteration with resultant weight loss.<sup>1</sup> The focus may be on body size, shape, or weight. Typical disordered behaviors that should prompt suspicion include an increase in food rules, such as not eating after a certain time or only eating “clean foods,” restriction of whole food groups or macronutrients (i.e., full elimination of dairy, meat, sugar or carbohydrates), eating separately from the family or making individual separate meals, keeping a food diary, counting calories, reading labels, or using a fitness app.

Although there are occasions when this type of weight management is appropriate in adults under medical supervision,



**Table 1. Types of Eating Disorders**

Body image disturbance	No body image disturbance
Anorexia Nervosa	Pica
Bulimia Nervosa	Rumination Disorder
Binge Eating Disorder	Avoidant/Restrictive Food Intake Disorder
Atypical Anorexia Nervosa	(ARFID)

**Table 2. Common presenting problems in those with eating disorders**

Restrictive Eating Disorders	Non-restrictive Eating Disorders
Dizziness or Syncope	Weight gain
Fatigue	Heartburn or indigestion
Early satiety	Difficulty sleeping
Constipation	Unintentional vomiting
Abnormal periods	Rumination
Decline in sports or academic performance	Extremity swelling

it is never appropriate for a child or adolescent to engage in these behaviors. Even when weight loss is indicated in someone who is still growing and maturing their body and brain, focus should remain on inducing positive changes to health behaviors rather than elimination or scrutinization of negative ones.<sup>3</sup>

### Non-Restrictive Eating Disorders

Non-Restrictive Eating Disorders include bulimia nervosa (BN) and binge eating disorder (BED). These patients have negative body image disturbance and are fearful of weight gain.<sup>1</sup> Those with BN will try to prevent weight gain with purging behaviors.

Both BN and BED have a bingeing component, and behaviors noticed by the family may include excessive empty food wrappers, eating in secret or away from the family, night eating, large quantities of food missing, or multiple stops for food to avoid the embarrassment of buying large quantities of binge foods at once. Many patients will fast during the day either as an attempt to prevent weight gain from a previous binge or to “prepare” for a binge that evening. Purging behaviors are also typically hidden from family and friends. Common patterns seen with purging include frequent or prolonged bathroom use after eating, longer than typical showers and excessive water intake. The family may

notice clogged drains, ruminants in the stool, or unusual items in the bathroom to induce vomiting. Sometimes, vomitus is hidden in trashcans or in jars in the bedroom.

Bingeing and purging both have a “numbing effect” during the episode but lead to feelings of shame and low self-esteem afterwards.<sup>1</sup> It is important not to accuse, blame, or punish someone for these episodes. Rather, acknowledgment, support, and structure should be offered to help reduce the behaviors and related thoughts. It is recommended families observe the patient for 30-60 minutes after eating if purging is suspected. This helps them refrain from using the restroom and provides distractions from purging urges that follow eating.

### How Eating Disorders Present

Eating disorders are mental health illnesses that thrive from secrecy. Presenting concerns will focus on symptoms rather than eating habits or weight changes.

This makes it difficult for patients and families to openly discuss and primary care providers to independently identify. Therefore, it is pertinent to screen for eating disorder behaviors at routine physicals and any time there is a concern for changes in weight or related symptoms.<sup>4</sup>

There are two main screening tools for

**Table 3. Eating Disorder Screening Tools**

SCOFF <sup>5,6</sup>	ESP <sup>7</sup>
S – Do you make yourself <b>Sick</b> because you feel uncomfortably full?	Are you satisfied with your eating patterns? (No is an abnormal response).
C – Do you worry you have lost <b>Control</b> over how much you eat?	Do you ever eat in secret?
O – Have you recently lost more than <b>One stone</b> (~14 lbs) in a three-month period?	Does your weight affect the way you feel about yourself?
F – Do you believe yourself to be <b>Fat</b> when others say you are too thin?	Have any members of your family suffered with an eating disorder?
F – Would you say <b>Food</b> dominates your life?	Do you currently suffer with, or have you ever suffered in the past with an eating disorder?

primary care providers to use in clinic. Both are free, brief, and validated. Both can be given in written or oral form.

A score of two or more abnormal responses for either the SCOFF or ESP results in a positive screen and warrants further history, exam and work-up. Although these are self-administered tools, for children and adolescents it may prove useful to have a guardian review and comment on the answers if there is high suspicion of abnormal eating patterns. For practices with a higher prevalence of adults with obesity, the Screen for Disordered Eating (SDE) may be a more effective tool, as it has been validated for Binge Eating Disorders in adults.<sup>8</sup>

### Diagnosing Eating Disorders<sup>1</sup>

If the person’s weight is below expected (using BMI for adults and growth curve data for children), a REDO would be the diagnosis. REDOs may have compensatory behaviors (e.g., excessive exercise) or purging behaviors (e.g., intentional vomiting or laxative abuse). The DSM-V designates these conditions as anorexia nervosa – restrictive type (ANR) or anorexia nervosa – binge/purge type (ANBP).

If the person’s weight is at or above where expected, further investigation is needed to properly diagnose the eating disorder.<sup>1</sup> Atypical anorexia nervosa (AAN) is a REDO that does not result in being underweight because the person started above their ideal weight (see section on obesity). Patients with BN and BED are NREDOs with focus on behaviors more than weight loss. Both BN and

BED present with bingeing, on average, once a week for the past three months. Those with BN will attempt to prevent weight gain through compensatory behaviors such as self-induced vomiting, misuse of laxatives, diuretics, or other medications, fasting after a binge, or excessive exercise.

### The Medical Role in Treatment

Although being able to correctly identify the type of eating disorder is ideal, it is not necessary to move forward in treatment recommendations. The most important job for a primary medical provider is to identify maladaptive eating behaviors, assess the immediate physical health risks, and assist in finding an appropriate treatment modality.<sup>9</sup>

### Initial Assessment

The initial assessment is focused on safety. Determining the need for medical hospitalization or acute psychiatric hospitalization is first priority. Criteria for medical inpatient admission varies based on age, history, and admitting facility, but generally focuses on severe bradycardia, electrolyte, or EKG abnormalities, prolonged food refusal, or high risk of refeeding syndrome. If the patient is deemed stable, an initial outpatient work-up is initiated.<sup>4</sup> This includes orthostatic blood pressure and heart rate measurements and a post-void, gowned, blind weight. The physical exam and laboratory studies assess for signs of malnourishment and indicators



of purging or compensatory behaviors. The vital signs, physical exam and work-up are used symbiotically to assess the patient's physical health, as it is common for one or more parts of this work-up to remain normal, falsely assuring the provider of medical stability. Initial work-up includes Urinalysis, UCG, CMP, CBC, Mag, Phos, Amylase, TSH, Iron studies, Vitamin D3 level, and Resting 12-lead ECG.<sup>4</sup>

### Supporting the Treatment Team

Depending on location and accessibility to specialists, the PCP may need to be an ongoing treatment team member. PCP's main roles are to establish a target weight range, monitor for improving physical health, determine exercise clearance, and manage symptoms associated with nutritional rehabilitation.<sup>4</sup> Regardless of the type of eating disorder, the most common symptoms are gastrointestinal (constipation, diarrhea, heart burn, gastroparesis), cardiovascular (fatigue, dizziness, hypovolemic shock), and endocrinologic (hypoglycemia, height stunting, amenorrhea). The American Academy of Pediatrics has released an updated set of guidelines outlining specific approaches to treatment.<sup>4</sup> Other useful medical treatment guidelines include those published by the American Psychological Association (APA), American Association of Family Physicians (AAFP), the Academy for Eating Disorders (AED) Purple Book,<sup>10-12</sup> and the AN specific German S3 Guideline.<sup>13</sup>

### Treatment Modalities - Therapeutic Approaches

The earlier a patient engages in eating disorder treatment, the higher likelihood of recovery.<sup>14</sup> Other protective factors include early weight gain,<sup>15</sup> a desire for recovery, consistent and cohesive family support, and families' ability to demonstrate resilience.<sup>16</sup> Therefore, the gold standard treatment approach for children and adolescents is one that involves these key components and is known as Family Based Treatment (FBT) or The Maudsley Approach.<sup>17-19</sup> In FBT, the treatment team consists of a specially trained therapist and the

medical provider (general or specialty trained). There is no nutritionist involved. The therapist acts as a parental coach, family educator, and incorporates components of traditional individual based therapies when appropriate.

Phase one focuses on physical and nutritional rehabilitation. In this phase, parents take over all responsibility for the child's intake. They decide what, when, how much, where, and how long the child will eat. They also dictate any consequences that occur if the child chooses not to comply with the established rules. The medical provider's role is greatest in phase one. This is when the most likelihood for physical complications will arise and when the therapist heavily relies on the medical data and assessment to help guide treatment recommendations. Typically, patients are seen by their medical providers every one to two weeks initially and spaced appropriately thereafter. The therapist will request that the medical provider establish an expected goal weight range for the patient by utilizing individual growth curves and medical history. In addition, it is the medical provider's responsibility to determine safety of all physical activity. Typically sports, physical education class and high energy activities are halted initially, with slow reintegration when progress in treatment is achieved and any physical symptoms that increase risk of injury resolve (such as dizziness or hypoglycemia).<sup>20-21</sup>

In phase two, the patient is weight restored and medically stable, but still may suffer from complications of malnutrition or the refeeding process. Patients are typically seen every one to three months by their medical provider in this phase, depending on progression and needed symptomatic management. Therapeutically, focus is shifted back to the patient, helping them overcome personal struggles with negative body image and disordered behaviors. Responsibility of food choices is slowly transferred back to the patient in a controlled, deliberate manner. Once the patient is fully responsible and making appropriate food choices, and all typical activity has been resumed, the therapist will enter the family

**Table 4. Higher Levels of Care for Eating Disorder Patients**

Intensive Outpatient Program (IOP)	Typically held outside of school/work hours, 3-5 hour sessions, 3-5 days a week
Partial Hospitalization Program (PHP)	A day program, 6-10 hours a day, 5-7 days a week, usually used as a step down from residential
Residential Program (Res)	Admitted to a facility, 24/7 care, must be medically stable
Inpatient (IP)	Medical stabilization is needed prior to treatment; can be an independent hospital or connected with a residential program

into phase three. This final phase is typically short and focuses on reassurance, reflection, and prevention.

In FBT, the parents drive the decision making and treatment.<sup>17</sup> The therapist and medical provider act as a guide and support figure, utilizing family shared decision-making techniques throughout the treatment. Unlike traditional or individual based treatment, vital signs and assessments are discussed openly with the family and patient. This means the patient is aware of any changes in weight and exam throughout treatment. This information is vital to help the parents in next-step decision making and allows the therapist to work with the patient in destigmatizing any myths around food, body shape or size and normalize appropriate weight gain.

The alternate approach, and that typically used in adults, is often called the traditional model or individualized approach (TM/IA). In TM/IA, the team consists of an individual therapist to support the patient, a nutritionist that provides a meal plan, and a medical provider. The medical provider's role is like that in FBT, but treatment takes a more directive approach and relies heavier on the physician's expertise and planning, although components of FBT are usually incorporated as seen fit based on family dynamics.

In both approaches, consistent team communication is essential for progression towards recovery. In addition to the key treatment members, it is common to involve additional specialties such as traditional family therapist, psychiatry, and medical social work, as well as offer supplement group therapy modalities.<sup>4</sup>

### Levels of Care

Outpatient care, as described above, lasts 12-24 months, on average. If the patient stalls in progress or the treatment demand is unreasonable or not feasible for the family to execute, there are higher levels of care (HLOC) that provide additional support (Table 4). All these programs incorporate individual, group and family therapy, nutrition education, and meal observation.

PHP, Res, and IP have medical providers and/or psychiatrists. IOP programs will vary on the level of medical oversight and may require ongoing medical management by the outpatient provider. If acute psychiatric hospitalization is warranted due to suicidal ideation or safety concerns, programs will work with local facilities to accommodate transfers as needed.

### Additional Considerations for the 21<sup>st</sup> Century

#### Obesity

With recent government identification and prioritization of reducing obesity in Americans of all ages,<sup>22</sup> health care providers are well trained to identify obesity and provide obesity education. However, there is a paucity of education efforts to promote safe health behavior changes. This, combined with societal and implicit biases, has led to an increase in eating disorder behaviors in overweight and obese patients that are often deemed safe or even encouraged by health providers.<sup>23,24</sup> Atypical Anorexia Nervosa (AAN) is a diagnosis added to the DSM-V to provide clear delineation between healthy and unhealthy weight loss behaviors.<sup>1</sup> AAN is diagnosed when an individual uses unhealthy



restrictive behaviors just as seen in classic AN but their weight remains at or above the target range. Studies have shown that patients with AAN are diagnosed later and hospitalized less, although they have just as many complications and health risks as patients with classic AN.<sup>25-27</sup> Therefore, when working with an individual on weight management, it is prudent to assess not just the weight loss, but the behaviors that resulted in the weight loss.

### Social Media

As social media continues to evolve and become integrated into daily lives of young Americans for social connections, news, and entertainment, it is natural for this medium to influence health behavior choices as well. One recent study of young adults 19-32 years-old showed a significant linear correlation between the amount of social media use (measured by frequency or volume) and concerning eating behaviors.<sup>28</sup> In addition, social media has provided an ever evolving and expanding platform for pro-eating disorder communities, making it difficult for families and community members to monitor the most recent fads, influencers and recommendations for surreptitious behaviors.<sup>29</sup> Using social media for thirty minutes a day has been linked to self-objectification and internal drive for thinness.<sup>30,31</sup> Evaluating patients' use of social media and intentions behind the use is an essential part of an eating disorder evaluation.

### COVID-19

As with all mental health disorders, the recent pandemic caused by SARS-CoV-2, or COVID-19, has caused a surge in eating disorder presentations, severity, and treatment needs. Multiple studies conducted in the United States have shown an increase in referrals for treatment and admission rates.<sup>32,33</sup> A national study in Australia showed an increase in restriction and bingeing in the general population since April 2020, and worsening restriction, purging, exercising, and bingeing behaviors in those previously diagnosed with an eating disorder.<sup>34</sup>

Certain populations may be at greater risk of developing an eating disorder or worsening

eating behaviors as a result of the COVID-19 pandemic. One study showed greater negative effect on recovery and relapse in those with bulimia or binge eating disorder.<sup>35</sup> The CDC examined changes in emergency department visits for mental health concerns in children and adolescents and found a greater than 50% increase in visits for eating related concerns since 2019 in adolescent girls aged 12-17 years.<sup>36</sup> For patients with known eating disorders, it is recommended to ask about the household environment before and after the start of the COVID-19 pandemic, as increased arguing and/or increased fear for the safety of loved ones was shown to be a predictor of worsening symptoms.<sup>35</sup>

### Conclusion

Eating disorders are common, complex, and present in a variety of different ways. Their incidence and severity are increasing due to social media outlets and the recent COVID-19 pandemic. Eating disorders can be seen in all body types, races, ethnicities, and ages. Early detection through screening and high suspicion is needed by PCPs to prevent hospitalization and assist with establishing an appropriate treatment team. For children and adolescents, the family-based model is evidenced based and the preferred treatment but requires a specially trained therapist in FBT. Regardless of treatment type, the medical provider plays a key role in treatment, assessing and treating acute and chronic physical sequela of the disease.

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**Disclosure**

None reported.

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