

# Understanding Eating Disorders

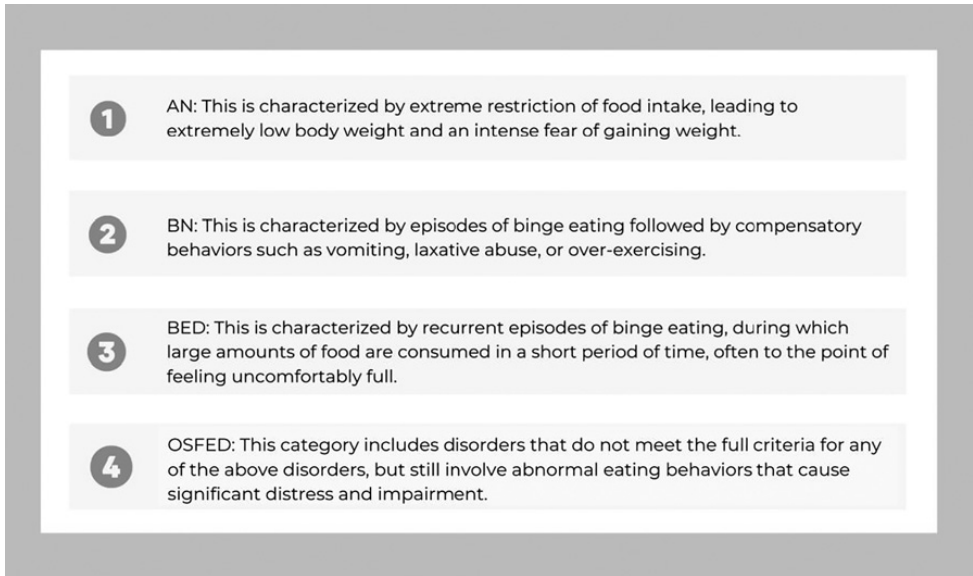
Eating disorders (EDs) are serious biological, psychological, and culturally based disorders that are widespread in many parts of the world. They are relatively common psychiatric disorders and, although rates vary, some estimate the lifetime prevalence of EDs to be 8.4% for women and 2.2% for men worldwide (Galmiche et al., 2019). EDs are life threatening and cause psychological impairment as well as substantial life dysfunction (American Psychiatric Association [APA], 2013). Medical comorbidities (e.g., cardiac arrhythmias, osteoporosis, gastroenterology issues, infertility) and high suicide rates are associated with the disorder, leading to mortality rates up to five times higher than the general population (Yao et al., 2016).

EDs are treatable. Full recovery is possible, especially with early intervention (Mitchell et al., 1993; Treasure & Russell, 2011). However, many patients do not receive the care they need to recover (Keski-Rahkonen & Mustelin, 2016). EDs are associated with high levels of shame and stigma, partly because they are trivialized as vanity issues, which prevents individuals from seeking treatment (Becker et al., 2020). Additionally, specialist ED clinicians are not up to date on the best practices. In the United States, there is a dearth of clinicians trained in evidence-based treatment, which hinders patients from receiving the interventions needed for recovery (Cooper & Kelland, 2015; Waller et al., 2012). There is still more to be done in understanding EDs and with their respective treatments, especially considering there are still a number of patients in evidence-based treatment who don't show significant progress (Dalle Grave et al., 2013; Legenbauer & Meule, 2015). Understanding why people are not getting better is critical to amending treatments and improving recovery rates.

In an effort to provide a comprehensive understanding of this overlapping presentation, this chapter provides a brief overview of the EDs typically seen to co-occur with OCD. The following sections outline the criteria for EDs, along with their key features, maintenance variables, and a brief overview on the treatments that are most indicated. Chapter 2 will provide a detailed understanding of the leading treatments for EDs.

## Classification of EDs

The *Diagnostic and Statistical Manual of Mental Disorders – Fifth Edition* (DSM-5) has reorganized the way EDs are classified. The new categorization, named Feeding and Eating Disorders, expanded diagnostic criteria for most EDs. Binge-eating disorder (BED) was officially added and the residual diagnostic category previously named ED not otherwise specified (EDNOS) was expanded and renamed other specified feeding or ED (OSFED). The EDs discussed in this book include anorexia nervosa (AN), bulimia nervosa (BN), BED, avoidant/restrictive food intake disorder (ARFID), and OSFED.



**Figure 1.1** Classification of EDs

## AN Presentation

AN is a psychiatric disorder characterized by food restriction leading to a significantly low body weight or lack of appropriate weight milestones. AN is associated with an intense fear of weight gain, a marked disturbance in body image illustrated by significant body dissatisfaction and/or body dysmorphia, and poor insight regarding the seriousness of the current low body weight and/or the behaviors impeding weight gain. Two subtypes are recognized: the restricting type and the binge-eating/purging type (APA, 2013).

### Key Features

Individuals with this disorder reach an extremely low weight by restricting the amount of food consumed, and, at times, by engaging in excessive exercise. Extreme restriction is achieved in three major ways: eating as little food as possible through methods such as counting calories, delaying eating for as long as possible (i.e., missing meals, fasting), and cutting certain foods or food groups out of their diets (e.g., desserts, fats) (Fairburn, 2013). People with AN may also misuse laxatives and/or diuretics, engage in self-induced vomiting, or exercise to manage weight and reduce anxiety about eating and weight gain (Fairburn, 2013). There are also a number of personality or temperament features often observed in people with AN: perfectionism (Halmi et al., 2000; Shafran et al., 2002), high harm avoidance, high obsessionality (Le Grange et al., 2012), and overall high trait anxiety are often present (Pollice et al., 1997). These traits may serve as clues to the risk factors, shared neurobiological or genetic links with other disorders (e.g., behavioral phenotype of OCD), and explanations for some of the difficulties in responding to treatment (Strober, 2004).

## Maintenance Variables

People with AN engage in rituals, avoidance, and checking behaviors that appear to function as strategies to achieve a lower weight, prevent weight gain, and/or to reduce anxiety about weight gain and body dissatisfaction (Gianini et al., 2015; Steinglass, 2011). Individuals with AN may move things around the plate and/or meticulously measure their food. Avoidance behaviors as well as checking behaviors are common. Personality traits in those with AN include perfectionism, obsessive thinking, rigidity, and use of avoidant coping styles (Casper, 1990; Raney et al., 2008; Shafran et al., 2002; Wonderlich et al., 2005). Although traits often seen in those with AN typically exist prior to the onset of the disorder and can remain present to a degree in recovery, it is important to note that starvation effects (e.g., obsessionality, affect dysregulation, preoccupation with food) and having the AN diagnosis can produce or exacerbate these features (Casper, 1990; Kaye et al., 2004; Keys et al., 1950; Pollice et al., 1997).

These rituals and avoidance behaviors, along with effects from starvation and personality features, can serve as both onset and maintenance variables. They prevent the patient from gaining weight (and thus nourishment), building distress tolerance skills, violating expectancies and acquiring corrective information about how food affects the body and anxiety, and spending time creating other domains to obtain self-worth – thereby maintaining the disorder.

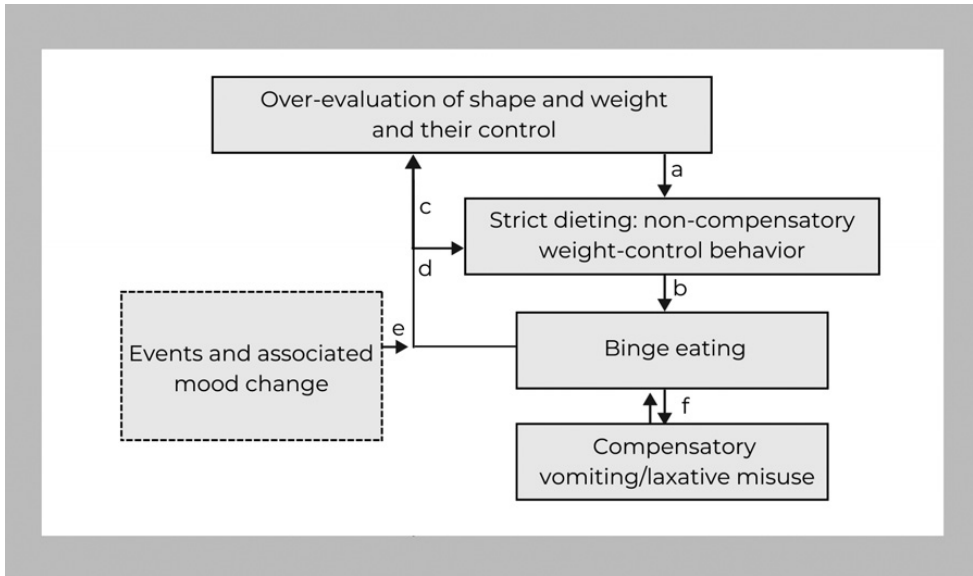
## AN Treatment

Empirically supported treatments for adults with AN are limited. There is a lack of evidence pointing to one psychological treatment emerging as superior for adults with AN (Byrne et al., 2017; Dalle Grave et al., 2016; Watson & Bulik, 2013), and there is no current evidence for pharmacology providing an alternative (Cassioli et al., 2020). The psychological treatments that have some evidence for change include the Maudsley model of AN treatment for adults (MANTRA), cognitive-behavioral therapy enhanced for EDs (CBT-E), specialist supportive clinical management (SSCM) (Byrne et al., 2017; Dalle Grave et al., 2016; Zeeck et al., 2018), and focal psychodynamic therapy (FPT) (Zeeck et al., 2018). None of these treatments have provided impressive outcomes thus far. In 2017, Byrne et al. compared MANTRA, SSCM, and CBT-E. All three treatments showed an equivalent reduction in psychopathology with no significant differences with regard to BMI change. However, CBT-E was more effective in helping patients achieve a physically healthy weight. Further, a study by Fairburn et al. (2013) on CBT-E for adult AN demonstrated improvements in weight and ED pathology. This study provides strong, promising support for CBT-E and its transdiagnostic application.

Treatment outcomes for adolescents with AN are more robust, resulting in clear treatment recommendations, including family-based treatment (FBT) as the gold standard and CBT-E adapted for adolescents as a reasonable alternative (Dalle Grave et al., 2013; Lock & Le Grange, 2019).

## BN Presentation

BN is characterized by binge eating followed by a compensatory behavior to prevent weight gain and to avoid any physical and/or psychological consequences of the binge (e.g., bloating, guilt). Binge eating is defined as consuming an unusually large amount of food within a short period of time (within two hours), accompanied by a perceived loss of control to stop eating or inability to limit the food intake. Compensatory behaviors can include



**Figure 1.2** Binge Cycle

purging via self-induced vomiting or inappropriate laxative use, as well as nonpurging compensatory behaviors such as excessive exercise, fasting, diuretics, or any other medications to prevent weight gain. Additionally, self-evaluation is unduly influenced by body shape, weight, and their control (APA, 2013).

### Key Features

Individuals with BN engage in dietary restraint but may slip and break a “rule” or eat something regretful with family or peers due to social pressure. Subsequently, they may experience intense regret and negative self-talk, which then can lead to maladaptive behavior, including bingeing. People with BN often experience all-or-nothing/black-and-white thinking about food: for example, “I already screwed up, so I might as well just keep eating.” Overeating is often perceived as a failed attempt to diet, which is associated with feeling like a failure. The person might then continue to eat or binge to escape the negative feelings associated with the perceived failure.

Individuals with BN have a higher incidence of other impulsive maladaptive behaviors, including alcohol abuse, shoplifting, and self-harm behaviors, as well as comorbid disorders such as depression, personality disorders, and substance use disorders (Crow et al., 2014; Godart et al., 2002; Hatsukami et al., 1986; Vervaet et al., 2004). Impulsivity, novelty seeking behavior (Atiye et al., 2015), emotional dysregulation, and struggle with distress tolerance (Anestis et al., 2007; Lavender et al., 2015) are also common.

### Maintenance Variables

The best-understood model for conceptualizing the key features and maintenance factors for BN has been described by Fairburn (2008). Similar to AN, those with BN spend a lot of time and energy trying to lose weight, prevent weight gain, and attain an ideal body. People

with BN have an overemphasis on weight, shape, and the control thereof on their self-worth, though it is unclear whether these traits are a cause of the disorder, a manifestation of it, or both (Fairburn, 2008). This over-evaluation of shape and weight will lead people with BN to engage in attempts to control their food by putting themselves on restrictive diets, engaging in food rituals or calorie limits, and avoiding some foods altogether.

Because of weight loss attempts, individuals with BN can be in a semistarvation state, which is also a catalyst to binge (Becker et al., 2020; Fairburn, 2013). They also often engage in the same body checking or avoidance behaviors as those with AN, which may reflect escaping anxiety and/or be direct expressions of overvaluing weight and shape (Shafran et al., 2004). Another aspect of BN, which will be further examined in the section “BED Presentation,” includes using food as a coping strategy or numbing agent after a negative affectual experience or a negative event (Becker et al., 2020; Fairburn, 2013). By engaging in avoidance or other maladaptive coping skills, the opportunity to build adaptive skills and find other areas of self-worth is lost, furthering the maintenance of the disorder.

## BN Treatment

There has been a considerable amount of research done on treatment of BN in adults, including randomized controlled trials examining psychotherapy, pharmacological interventions, and their combinations. The results have consistently demonstrated that CBT is superior to other forms of psychotherapy for adults (Poulson et al., 2014; Shapiro et al., 2007). Interpersonal psychotherapy (IPT) is considered a leading, empirically supported alternative to CBT according to the National Institute for Health and Clinical Excellence (NICE, 2020), and there has been some promising research on the effects of dialectical behavioral therapy (DBT) on BN (Chen et al., 2008; Safer et al., 2010).

There is evidence suggesting that the combination of CBT paired with an antidepressant medication (typically a selective serotonin reuptake inhibitor [SSRI]) can lead to optimal outcomes for some adults with BN (Agras et al., 1992; Walsh et al., 1997). However, CBT alone has been shown to produce the largest treatment effect (Flament et al., 2012; Hagan & Walsh, 2021). While a thorough review of pharmacological treatments is not the focus of this book, high doses of the SSRI fluoxetine is approved by the FDA to treat BN in adults specifically (Goldstein et al., 1995). For adolescents, research outcomes provide similar suggestions to the treatment of adolescent AN, where FBT is the leading recommendation and CBT-E adapted for adolescents is a reasonable alternative (Dalle Grave et al., 2013; Lock & Le Grange, 2019).

## BED Presentation

Individuals with BED engage in the same binge-eating behavior as those with BN, but with an absence of compensatory behaviors. As mentioned, a binge involves consuming excessive amounts of food in a short period of time (e.g., within two hours), with a sense of loss of control of eating during the episode. Binge-eating episodes are associated with three or more of the following: eating more rapidly than normal, eating until uncomfortably full, eating large amounts when not physically hungry, eating alone with a sense of embarrassment, feeling disgusted with self, depressed, or very guilty afterward. The diagnosis of BED does not require there to be an overemphasis on weight, shape, their control, and/or body image concerns (APA, 2013).

## Key Features

BED impacts many people; some estimates concluding that it has the highest prevalence of all EDs (Erskine & Whiteford, 2018), but it is often clandestine as the majority of people do not seek help (Coffino et al., 2019b). Keski-Rahkonen (2021) describes several large studies where binge eating was found in people with a history of abuse, neglect, and violence. Perceived or real excess weight, childhood weight-related teasing, body dissatisfaction, and persistent dieting are shared risk factors for binge eating across all socioeconomic groups (West et al., 2019). Although there is an absence of the overvaluation of shape, weight, their control, and/or body image difficulties as a diagnostic criterion, it is still a commonly occurring cognition and has been found to be correlated with higher levels of ED psychopathology (Grilo et al. 2008; Hrabosky et al., 2007). Further, Coffino (2019a) found that this overvaluation of weight and shape was associated with greater BED-related functional impairment.

## Maintenance Variables

Similar to those with BN, people with BED may overeat and perceive this way of eating as a failure, leading to all-or-nothing thinking as well as a shame and guilt mindset. This emotional state can then fuel subsequent binge eating. Bingeing can result from not consuming enough food throughout the day. Lack of adequate nutrition can result from dieting, but also from stress-induced appetite loss, poor planning, or issues with appetite-regulating hormones (Fairburn, 2013). Ultimately, bingeing may be a result of dietary suppression or it may serve as a pure coping strategy for different mood states or negative life events. These behaviors and coping styles quickly become cyclical and self-maintaining. Those with higher weights who have internalized the erroneous (and fatphobic) belief that people have higher weights because of an internal trait or personal deficit (e.g., lack of self-discipline) will be particularly susceptible to this cycle of dieting or feeling shame around food choices and amount of consumption (Durso et al., 2012).

## BED Treatment

Both CBT and IPT have demonstrated strong empirical support for BED (Wilson et al., 2007). For pharmacology, the only drug currently approved for BED is lisdexamfetamine dimesylate. For a more comprehensive review on pharmacology, see Brownley et al. (2007) and Reas and Grilo (2015).

## ARFID Presentation

ARFID is characterized by an eating or feeding disturbance leading to a condition associated with one or more consequences, including significant weight loss, poor growth, nutritional deficiency, psychosocial dysfunction, or the need for supplemental nutrition. Individuals with ARFID do not avoid or restrict food based on a body image disturbance or undue emphasis of weight, shape, or their control. The eating issue is not associated with cultural or religious practices, cannot be attributed to a medical condition, and does not occur during the course of AN or BN (APA, 2013).

## Key Features

ARFID can present in a number of ways; however, there are typically three primary reasons why most patients report avoiding food: (a) fear of aversive consequences of eating;

(b) long-standing reduced appetite, quick to feel full, and/or a lack of interest in food; or (c) sensory discomfort. A patient may fear that they will vomit, choke, and/or feel physical discomfort in certain areas of the body when eating. Additionally, patients may have an aversive reaction to certain food textures, temperatures, colors, or smells, or have a preoccupation with how food is served (e.g., foods that are touching or how food is cut) and how it is prepared (e.g., vegetables need to be cooked lightly to still retain crunchy sensation) (Nicely et al., 2014; Thomas et al., 2018).

This feeding or eating disturbance is associated with extreme selective eating, appetite disruption, sensory sensitivities, or anxiety. Individuals diagnosed with ARFID often have experienced pickiness or feeding issues beginning in childhood or infancy, have comorbidities that also include sensory sensitivity traits (autism spectrum disorder [ASD], attention deficit hyperactivity disorder [ADHD], intellectual disabilities), and/or have a co-occurring anxiety disorder where there is a long history of engaging in safety and escape behaviors to manage anxiety (Nicely et al., 2014; Spettigue & Norris, 2019). Patients, and/or their parents, may use language such as “eats like a bird” or “does not really like food” to describe the patient’s relationship with food.

### **Maintenance Variables**

Patients of all presentations behave with rigidity and avoidance, as well as using rituals and/or safety/escape behaviors. Often, parents or partners will accommodate the avoidance by making a separate meal to the rest of the family or allowing exceptions in school to meet the patient’s expressed “needs.” Similar to other EDs, the symptoms of anxiety, appetite suppression, and hypersensitivity to sensory elements can be exacerbated by the starving or semistarvation state, thus maintaining or worsening the disorder (Nicely et al., 2014). Additionally, avoidance (directly by the patient or indirectly through accommodation from a loved one) will maintain the patient’s low self-efficacy in their ability to tolerate the discomfort triggered by the food. Avoidance and safety behaviors will also maintain the fears around adverse consequences like vomiting and choking. As a result, the patient has less opportunity for inhibitory learning and to develop tolerance to uncertainty and distress (Thomas & Eddy, 2018).

### **ARFID Treatment**

There are no well-established, empirically supported treatments for ARFID (Lock, 2015). Prospective research and conclusions drawn from studies have suggested that FBT, parent-support models, CBT, exposure-based interventions, and adjunctive pharmacology may attain the best results (Dalle Grave & Sapuppo, 2020; Thomas et al., 2020). A feasible and acceptable CBT manual for medically stable outpatient ARFID patients (CBT-AR) has been developed. A feasibility study done on CBT-AR for adults demonstrated a large and significant increase in BMI, and at posttreatment 47% of patients no longer met the criteria for ARFID. The authors note that randomized controlled trials are needed to confirm findings, but results suggest promising outcomes (Thomas et al., 2021).

### **OSFED Presentation**

When someone is experiencing eating disturbances that cause clinical distress or life impairment in important areas of functioning but the behaviors do not meet full criteria for an ED listed in the DSM-5, they will receive an OSFED diagnosis. The categories

proposed include atypical AN (AN without significant low weight), purging disorder (recurrent purging to influence shape or weight with the absence of binge episodes), and night eating syndrome (binge eating occurring exclusively at night, usually associated with sleep issues). The subthreshold disorders include clinically significant disordered eating that does not meet full criteria for AN, BN, or BED (e.g., BN or BED with frequency of binge episodes less than once per week) (APA, 2013).

In the DSM-5 there is also a category named Unspecified Feeding or ED (UFED). This diagnosis is provided when the symptoms are clinically impairing or distressing but there is not sufficient information to make a definite diagnosis, or when the clinician chooses not to identify the reasons why the criteria for a disorder are unmet. Other disordered eating problems exist. They do not have formal recognition but can cause significant impairment and psychological distress. One of these unclassified disorders relevant to the topic of this book is orthorexia nervosa (ON). ON involves an extreme preoccupation with healthy eating.

Originally described by Bratman (1997), ON is characterized by inflexibility with food, ritualized eating patterns, food avoidance, and food elimination driven by a concern around food being unhealthy or impure. There is an absence of an official diagnosis and lack of uniformity and methodology issues in assessment; however, there seems to be enough evidence to support ON as a separate disorder (Dunn & Bratman, 2016). Dunn and Bratman (2016) have proposed diagnostic criteria that include an obsessive focus on “healthy” eating, evidenced by compulsive behavior or mental preoccupation around restrictive dietary practices to optimize health, a violation of self-imposed dietary rules causing exaggerated fear of disease, a sense of personal impurity, and or physical sensations accompanied by anxiety and shame. Dietary restriction can become more rigid and intense over time, typically leading to weight loss despite an absence of this desire. The aforementioned traits cause clinical impairment in at least one meaningful area.

### **Key Features**

This disorder clinically presents as an overlap of AN and OCD features (Missbach et al., 2017). Similar to AN, patients typically have low insight into how their behaviors are maladaptive or a denial of the consequences of their rigid eating. Further, they will eat with similar rituals, attempt to control all food preparation (e.g., avoid eating at restaurants, bring prepped meals to social events), practice reading labels to look for specific ingredients, use food scales, count macronutrients, eliminate certain foods or food groups, and display distress if they cannot engage in these behaviors. Eventually, people experience medical and psychological consequences such as low body weight, malnutrition, and relationship or occupational stress from the prioritization of or preoccupation with “health” over other areas of functioning.

### **Maintenance Variables**

Individuals with ON have self-worth that is often tied to successfully complying with their food rules, and they may feel superior to others based on their diet. Similar to OCD, patients will have intrusive obsessions about health that cause anxiety and distress largely based on irrational or improbable fears (although reinforced by culture and media). They demonstrate low tolerance for eating in any way that may jeopardize their “health” and engage in compulsions including rituals, mental reviewing (e.g., thinking about all the “clean eating” choices made over a period of time), reassurance seeking (e.g., asking loved ones if they



believe the food they're consuming is healthy), and avoidance to either prevent becoming less "healthy" or to reduce their anxiety about health. This naturally functions to reinforce their rigid beliefs about health and food. This process becomes exhausting and time consuming, and creates dysfunction in many areas of the person's life.

## ON Treatment

There is scant literature providing little direction for any empirically supported treatments for ON. However, considering the overlapping features of AN and OCD seen in ON, treatment options may be ascertained from the empirically supported treatments of these similar disorders. This notion points to some version of exposure-based CBT, with some family assistance for adolescents. Further literature and scholarship are needed to provide more direction for treatment.

## In Summary

EDs are a group of mental health conditions characterized by abnormal eating habits and distorted attitudes toward food and body weight. EDs can affect people of all ages, genders, and backgrounds, but they are more common in females and typically begin in adolescence or young adulthood. They often involve a preoccupation with weight, body shape, and diet, and can lead to severe and dangerous weight loss, as well as having serious physical and psychological consequences (e.g., malnutrition, organ damage, death). Risk factors for EDs include a history of dieting, low self-esteem, perfectionism, and a history of trauma or abuse. EDs often co-occur with other mental health conditions, such as anxiety, OCD, depression, and substance abuse. EDs are treatable, and study outcomes have indicated CBT, FBT, IPT, and (in some cases) medication as the leading treatments for these disorders. Co-occurring presentations, especially OCD, can engender complexities, including those that affect and impair treatment.