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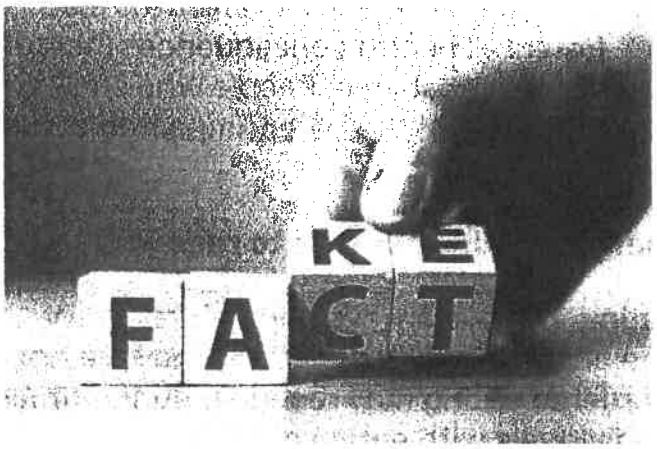
Feeding hope. www.nationaleatingdisorders.org

*SHORT PARENT TOOLKIT



There are many myths about the causes eating disorders, how serious they are, and who develops an eating disorder. The list below includes some of the most common questions we get about eating disorders:

Are eating disorders a choice?

Eating disorders are **not** a choice. They are complex medical and psychiatric illnesses that patients don't choose. They are bio-psycho-social diseases, which means that genetic, biological, environmental, and social elements all play a role. Several decades of genetic research show that biological factors are an important influence in who develops an eating disorder. A societal factor (like the media-driven thin body ideal) is an example of an environmental trigger that has been linked to increased risk of developing an eating disorder. Environmental factors also include physical illnesses, childhood teasing and bullying, and other life stressors. Eating disorders commonly co-occur with other mental health conditions like major depression, anxiety, social phobia, and obsessive-compulsive disorder. Additionally, they may run in families, as there are biological predispositions that make individuals vulnerable to developing an eating disorder.

Do parents cause eating disorders?

Organizations from around the world, including the Academy for Eating Disorders, the American Psychiatric Association, and NEDA, have published materials that indicate that parents don't cause eating disorders. Parents, especially mothers, were traditionally blamed for their child's disorder, but more recent research supports that eating disorders have a strong biological root. Eating disorders develop differently for each person affected, and there is not a single set of rules that parents can follow to guarantee prevention of an eating disorder, however there are things everyone in the family system can do to play a role in creating a recovery-promoting environment. Psychologists have seen improvements in the speed at which children and adolescents begin to recover when including parents in the treatment process.

Doesn't everyone have an eating disorder these days?

Although our current culture is highly obsessed with food and weight, and disordered patterns of eating are very common, clinical eating disorders are less so. 20 million women and 10 million men will struggle with an eating disorder at some point in their lives. A 2007 study found that 0.9% of women and 0.3% of men had anorexia [link] during their life, 1.5% of women and 0.5% of men had bulimia during their life, and 3.5% of women and 2.0% of men had binge eating disorder during their life. The consequences of eating disorders can be life-threatening, and many individuals find that stigma against mental illness (and eating disorders in particular) can obstruct a timely diagnosis and adequate treatment.

Are eating disorders really that serious?

Eating disorders have the highest mortality rate of any psychiatric illness. Besides medical complications from binge eating, purging, starvation, and over-exercise, suicide is also common among individuals with eating disorders. Potential health consequences include heart attack, kidney failure, osteoporosis, and electrolyte imbalance. People who struggle with eating disorders also have intense emotional distress and a severely impacted quality of life.

If eating disorders are linked to biology, is there anything I can do to recover?

It's important to remember that biology isn't destiny. There is always hope for recovery. Although biological factors play a large role in the onset of eating disorders, they are not the only factors. The predisposition towards disordered eating may reappear during times of stress, but there are many good techniques individuals with eating disorders can learn to help manage their emotions and keep behaviors from returning. Early intervention is a key part of eating disorder prevention, and helps reduce serious psychological and health consequences. Recovery from an eating disorder can be a long process and requires a qualified team of professionals and the love and support of family and friends. **Learn more about the stages of recovery >**

Aren't eating disorders a 'girl thing'?

Eating disorders can affect anyone, regardless of their gender or sex. Although eating disorders are more common in females, researchers and clinicians are becoming aware of a growing number of males and non-binary individuals who are seeking help for eating disorders. A 2007 study by the Centers for Disease Control and Prevention found that up to one-third of all eating disorder sufferers are male, and a 2015 study of US undergraduates found that transgender students were the group most likely to have been diagnosed with an eating disorder in the past year (Diemer, 2015).

It's currently not clear whether eating disorders are actually increasing in males and transgender populations or if more of those individuals who are suffering are seeking treatment or being diagnosed. Because physicians may have preconceptions about who eating disorders affect, their disorders have generally become more severe and entrenched at the point of diagnosis.

Can someone be too young or too old to develop an eating disorder?

Eating disorders can develop or re-emerge at any age. Eating disorder specialists are reporting an increase in the diagnosis of children, some as young as five or six. Many

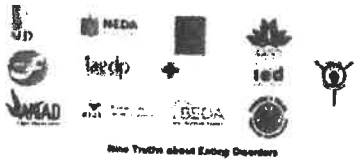
eating disorder sufferers report that their thoughts and behaviors started much earlier than anyone realized, sometimes even in early childhood. Although most people report the onset of their eating disorder in their teens and young adulthood, there is some evidence that people are being diagnosed at younger ages.

It's not clear whether individuals are actually developing eating disorders at younger ages or if an increased awareness of eating disorders in young children has led to improved recognition and diagnosis. Men and women at midlife and beyond are being treated for eating disorders, either due to a relapse, ongoing illness from adolescence or young adulthood, or due to the new onset of an eating disorder.

Doesn't recovery from an eating disorder take a long time?

Recovery time varies from person to person. Some people get better relatively quickly, while others take longer to improve. Although not everyone with an eating disorder will recover fully, many do improve with treatment. Even with full recovery, many people with eating disorders find that they have to take steps to make sure they stay well. This can include planning meals; regular check-ins with a therapist, dietitian, or doctor; medication; and/or other types of self-care.

Nine Truths About Eating Disorders >



Nine Truths about Eating Disorders

Various Authors

5 years ago
Understanding Eating Disorders

Truth #1: Many people with eating disorders look healthy, yet may be extremely ill.

Truth #2: Families are not to blame, and can be the patients' and providers' best allies in treatment.

Truth #3: An eating disorder diagnosis is a health crisis that disrupts personal and family functioning.

Truth #4: Eating disorders are not choices, but serious biologically influenced illnesses.

Truth #5: Eating disorders affect people of all genders, ages, races, ethnicities, body shapes and

weights, sexual orientations, and socioeconomic statuses.

Truth #6: Eating disorders carry an increased risk for both suicide and medical complications.

Truth #7: Genes and environment play important roles in the development of eating disorders.

Truth #8: Genes alone do not predict who will develop eating disorders.

Truth #9: Full recovery from an eating disorder is possible. Early detection and intervention are important.

Produced in collaboration with Dr. Cynthia Bulik, PhD, FAED and the Academy for Eating Disorders, along with other major eating disorder organizations (Families Empowered and Supporting Treatment of Eating Disorders, National

Association of Anorexia Nervosa and Associated Disorders, National Eating Disorders Association, The International Association of Eating Disorders Professionals Foundation, Residential Eating Disorders Consortium, Eating Disorders Coalition for Research, Policy & Action, Multi-Service Eating Disorders Association, Binge Eating Disorder Association, Eating Disorder Parent Support Group, International Eating Disorder Action, Project HEAL, and Trans Folx Fighting Eating Disorders).

Learn more and download a PDF of the 9 Truths about Eating Disorders.

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Risk Factors for Eating Disorders

Eating disorders are complex conditions that can arise from a combination of long-standing behavioral, biological, emotional, psychological, interpersonal, and social factors. Once started, however, they can create a self-perpetuating cycle of physical and emotional destruction.

Although scientists are still investigating the factors that can contribute to the development of an eating disorder, they have identified some risk factors for the development of an eating disorder.

Psychological Risk Factors

- Perfectionism
- Anxiety
- Depression
- Difficulties regulating emotion
- Obsessive-compulsive behaviors
- Rigid thinking style (only one right way to do things, etc.)

Sociocultural Risk Factors

- Cultural promotion of the thin ideal
- Size and weight prejudice
- Emphasis on dieting
- "Ideal bodies" include only a narrow range of shapes and sizes

Biological Risk Factors

- Having a close family member with an eating disorder
- Family history of depression, anxiety, and/or addiction
- Personal history of depression, anxiety, and/or addiction
- Presence of food allergies that contribute to picky or restrictive eating (e.g. celiac disease)
- Presence of Type 1 Diabetes

Why Early Intervention for Eating Disorders is Essential

Megan Jones, PsyD, and Tess Brown

4 years ago
Recovery

Treatment works best when delivered early.

Research on treatments for eating disorders, as well as most mental health problems in general, indicates that early identification and treatment improves the speed of recovery, reduces symptoms to a greater extent and improves the likelihood of staying free of the illness. For example, when adolescents with anorexia nervosa are given family-based treatment within the first three years of the illness onset they have a much greater likelihood of recovery (Lock, Agras, Bryson, & Kraemer, 2005; Loeb et al., 2007; Russell, George, Dare, & Eisler, 1987; Treasure & Russell, 2011).

Early intervention helps prevent serious psychological and health consequences.

Eating disorders have the highest mortality rate of any mental health illness. Eating disorders are unique among mental health disorders in that they manifest in physical health complications, which can lead to serious and life-threatening illnesses such as diabetes, cancer, organ failure and even death if not treated. Anorexia nervosa is the third most common chronic illness among adolescents. Young women who suffer from this illness have a mortality rate that is 12 times higher than average, making it the mental health illness with the highest premature mortality rate. If left untreated, eating disorders tend to become more severe and less receptive to treatment (Becker, Franko, Nussbaum, &

Herzog, 2004; Fichter, Quadflieg, & Hedlund, 2006).

It is important to acknowledge that developing an eating disorder is not a conscious choice. People suffering from eating disorders often do not understand the severity of their illness and are thus reluctant to seek help. It is critical to pursue early intervention strategies, such as education and screening, to prevent chronic malnutrition, long-term health complications and death. In other words, detecting and treating eating disorders as soon as possible has the potential to save lives.

In many cases, eating disorders can be prevented.

One of the biggest sparks of hope in eating disorders research is that some eating disorders can be prevented through in-person and online programs. Two examples of programs that have been shown to prevent eating disorder onset in at-risk groups are The Body Project and Healthy Body Image Program (StudentBodies).

Widespread screening improves access to early intervention.

Early interventions should start with education and screening . Screening is not intended to be diagnostic, but rather, to help identify individuals who are at-risk for or may be experiencing eating disorders and to provide information about appropriate resources. Diagnosis of an eating disorder should be done by a mental health professional, and ideally, an eating disorders specialist. This is important because treatment for eating disorders should involve a medical professional (e.g., primary care physician, family medicine, adolescent medicine specialist or pediatrician)—and ideally also one who specializes in eating disorders.

Eating disorders screening is important across multiple settings: middle and high schools, colleges and universities, pediatrics and primary care and within employee wellness programs (just to name a few).

The majority of eating disorders develop during adolescence and young adulthood, making screening during this period particularly critical for early intervention. Much research has focused on college students; college campuses are an ideal avenue to maximize prevention and test treatment

approaches, as they are an environment conducive to spreading information quickly through a surplus of channels. The typical onset period for eating disorders coincides with early college ages, and studies have identified a wide treatment gap on college campuses: 80% of students with clinically significant symptoms do not receive care (Eisenberg et al., 2011). Students with subclinical symptoms are even less likely to seek help, which evolves into more serious disordered eating, a poorer prognosis and an increased chance of relapse (Yager et al., 2006). Tactics to encourage people to seek help have typically focused on minimizing stigma, improving knowledge and access and addressing other barriers emphasized by traditional theories of health behavior (Biddle, Donovan, Sharp, & Gunnell, 2007). However, the majority of students with ED symptoms report not seeking help for other reasons such as a lack of time, lack of recognition and a desire to deal with the issue "on my own" (Lipson et al. in press). Therefore, research suggests that early intervention strategies should focus on initiatives that educate and engage students about the severity of EDs by providing convenient, relevant and action-oriented options. (Check out more information on NEDA's college campus initiative, Proud2Bme On Campus .)

Online, campus-wide screenings upon college enrollment is one strategy to reach students who are unaware of the severity of the illness and/or those who wish to handle the disease independently. These screenings serve as a gateway for students to learn more about eating disorders, and also as a means to get the best treatment associated with their level of risk. Connecting eating disorder screening to specific resources tailored to the individual's needs improves access to care and facilitates early intervention.

Eliminating stigma and raising awareness are important measures to initiate conversations, encourage further research development and influence prevention policies. However, early detection and screening may have the most significant life-saving impact. We should collectively focus our efforts to promote online screening tools that touch as many potentially at-risk people as possible to build a road to recovery.

GET SCREENED

Physical Signs and Symptoms of an Eating Disorder

Those struggling with an eating disorder may have some, but not all, of the following physical signs and symptoms. Presence of any of the signs that your loved one may be struggling is cause for serious concern and you should encourage them to seek professional help.

- Noticeable fluctuations in weight, both up and down
- Stomach cramps, other non-specific gastrointestinal complaints (constipation, acid reflux, etc.)
- Menstrual irregularities -- missing periods or only having a period while on hormonal contraceptives (this is not considered a "true" period)
- Difficulties concentrating
- Abnormal laboratory findings (anemia, low thyroid and hormone levels, low potassium, low blood cell counts, slow heart rate)
- Dizziness
- Fainting/syncope
- Feeling cold all the time
- Sleep problems
- Cuts and calluses across the top of finger joints (a result of inducing vomiting)
- Dental problems, such as enamel erosion, cavities, and tooth sensitivity
- Dry skin
- Dry and brittle nails
- Swelling around area of salivary glands
- Fine hair on body
- Thinning of hair on head, dry and brittle hair (lanugo)
- Cavities, or discoloration of teeth, from vomiting
- Muscle weakness
- Yellow skin (in context of eating large amounts of carrots)
- Cold, mottled hands and feet or swelling of feet
- Poor wound healing
- Impaired immune functioning

Signs of Anorexia Nervosa

- Dramatic weight loss
- Dresses in layers to hide weight loss or stay warm
- Is preoccupied with weight, food, calories, fat grams, and dieting
- Refuses to eat certain foods, progressing to restrictions against whole categories of food (e.g., no carbohydrates, etc.)
- Makes frequent comments about feeling "fat" or overweight despite weight loss
- Complains of constipation, abdominal pain, cold intolerance, lethargy, and excess energy
- Denies feeling hungry
- Develops food rituals (e.g., eating foods in certain orders, excessive chewing, rearranging food on a plate)
- Cooks meals for others without eating
- Consistently makes excuses to avoid mealtimes or situations involving food
- Maintains an excessive, rigid exercise regimen – despite weather, fatigue, illness, or injury, the need to "burn off " calories taken in
- Withdraws from usual friends and activities and becomes more isolated, withdrawn, and secretive
- Seems concerned about eating in public
- Has limited social spontaneity
- Resists maintaining a body weight appropriate for their age, height, and build
- Has intense fear of weight gain or being "fat," even though underweight
- Has disturbed experience of body weight or shape, undue influence of weight or shape on self-evaluation, or denial of the seriousness of low body weight
- Postpuberty female loses menstrual period
- Feels ineffective
- Has strong need for control
- Shows inflexible thinking
- Has overly restrained initiative and emotional expression

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Signs of Bulimia Nervosa

- In general, behaviors and attitudes indicate that weight loss, dieting, and control of food are becoming primary concerns
- Evidence of binge eating, including disappearance of large amounts of food in short periods of time or lots of empty wrappers and containers indicating consumption of large amounts of food
- Evidence of purging behaviors, including frequent trips to the bathroom after meals, signs and/or smells of vomiting, presence of wrappers or packages of laxatives or diuretics
- Appears uncomfortable eating around others
- Develops food rituals (e.g. eats only a particular food or food group [e.g. condiments], excessive chewing, doesn't allow foods to touch)
- Skips meals or takes small portions of food at regular meals
- Steals or hoards food in strange places
- Drinks excessive amounts of water
- Uses excessive amounts of mouthwash, mints, and gum
- Hides body with baggy clothes
- Maintains excessive, rigid exercise regimen – despite weather, fatigue, illness, or injury, the need to "burn off" calories
- Shows unusual swelling of the cheeks or jaw area
- Has calluses on the back of the hands and knuckles from self- induced vomiting
- Teeth are discolored, stained
- Creates lifestyle schedules or rituals to make time for binge-and-purge sessions
- Withdraws from usual friends and activities
- Looks bloated from fluid retention
- Frequently diets
- Shows extreme concern with body weight and shape
- Has secret recurring episodes of binge eating (eating in a discrete period of time an amount of food that is much larger than most individuals would eat under similar circumstances); feels lack of control over ability to stop eating
- Purges after a binge (e.g. self-induced vomiting, abuse of laxatives, diet pills and/or diuretics, excessive exercise, fasting)
- Body weight is typically within the normal weight range; may be overweight

Signs of Binge Eating Disorder

- Evidence of binge eating, including disappearance of large amounts of food in short periods of time or lots of empty wrappers and containers indicating consumption of large amounts of food
- Develops food rituals (e.g., eats only a particular food or food group [e.g., condiments], excessive chewing, doesn't allow foods to touch)
- Steals or hoards food in strange places
- Hides body with baggy clothes
- Creates lifestyle schedules or rituals to make time for binge sessions
- Skips meals or takes small portions of food at regular meals
- Has periods of uncontrolled, impulsive, or continuous eating beyond the point of feeling comfortably full
- Does not purge
- Engages in sporadic fasting or repetitive dieting
- Body weight varies from normal to mild, moderate, or severe obesity

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Emotional and Behavioral Signs of an Eating Disorder

Those struggling with an eating disorder may have some, but not all, of the following emotional and behavioral signs. Presence of any of the signs that your loved one may be struggling is cause for serious concern and you should encourage them to seek professional help.

- Intense fear of gaining weight
- Negative or distorted self-image
- Frequent checking in the mirror for perceived flaws
- Self-worth and self-esteem dependent on body shape and weight
- Fear of eating in public or with others
- Preoccupation with food
- Eating tiny portions or refusing to eat
- Avoiding eating with others
- Hoarding and hiding food
- Eating in secret
- Disappearing after eating — often to the bathroom
- Unusual food rituals (cutting food into small pieces, chewing each bite an unusually large number of times, eating very slowly)
- Any new practice with food or fad diets, including cutting out entire food groups (no sugar, no carbs, no dairy, vegetarianism/ veganism)
- Little concern over extreme weight loss
- Obsessive interest in cooking shows on television and collecting recipes
- Consumption of only "safe" or "healthy" foods
- Social withdrawal
- Making excuses for not eating
- Cooking elaborate meals for others, but refusing to eat them themselves
- Eating strange combinations of foods
- Elaborate food rituals
- Withdrawing from normal social activities
- Hiding weight loss by wearing bulky clothes
- Flat mood or lack of emotion
- Irritability
- Mood swings
- Hyperactivity and restlessness (unable to sit down, etc.)
- Rigidity in behaviors and routines, and experience of extreme anxiety if these are interrupted
- Excessive exercising
- Exercising even when ill or injured, or for the sole purpose of burning calories

Individuals with eating disorders may be at risk for co-occurring conditions such as mood and anxiety disorders, substance abuse (alcohol, marijuana, cocaine, heroin, methamphetamines, etc.), self-harm (cutting, etc.) and suicidal thoughts and behaviors.

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How to Support a Loved One with an Eating Disorder

- Educate yourself on eating disorders; learn the jargon
- Learn the differences between facts and myths about weight, nutrition, and exercise
- Ask what you can do to help
- Listen openly and reflectively
- Be patient and nonjudgmental
- Offer to help with practical tasks (laundry, transportation to and from appointments)
- Avoid discussions about food, weight, and eating, especially your own habits or those of others
- Model a balanced relationship with food, weight, and exercise
- Ask how they are feeling
- Remember that recovery is a marathon, not a sprint
- Focus on the emotional aspects of an eating disorder, not just the physical ones
- Encourage the sufferer to follow through with treatment recommendations
- Distract your loved one during and after meals to help with anxiety
- Refrain from telling the person what they should do
- Continue to reach out—individuals with eating disorders may find it hard to socialize and may push people away
- Arrange activities that don't involve food or eating so your loved one can continue to take part
- When it doubt, ask. They can't read your mind, and you can't read theirs
- Validate their feelings and their emotional pain, especially when they share something difficult or reveal that they have kept a secret
- Focus on positive personality traits and other qualities that have nothing to do with appearance
- Express any concerns that arise
- Don't take their actions personally
- Set boundaries to preserve your own emotional well-being

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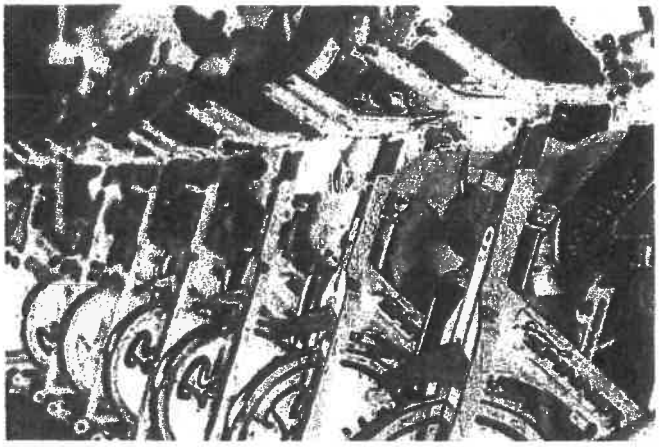

Compulsive exercise is not a recognized clinical diagnosis in the DSM-5, but many people struggle with symptoms associated with this term. If you are concerned about your or a loved one's relationship with exercise, please speak with a treatment professional.

WARNING SIGNS & SYMPTOMS OF COMPULSIVE EXERCISE

- Exercise that significantly interferes with important activities, occurs at inappropriate times or in inappropriate settings, or when the individual continues to exercise despite injury or other medical complications
- Intense anxiety, depression, irritability, feelings of guilt, and/or distress if unable to exercise
- Maintains excessive, rigid exercise regimen – despite weather, fatigue, illness, or injury
- Discomfort with rest or inactivity
- Exercise used to manage emotions
- Exercise as a means of purging (needing to "get rid of" or "burn off" calories)
- Exercise as permission to eat
- Exercise that is secretive or hidden
- Feeling as though you are not good enough, fast enough or not pushing hard enough during a period of exercise; overtraining
- Withdrawal from friends and family

HEALTH CONSEQUENCES OF COMPULSIVE EXERCISE

- Bone density loss (osteopenia or osteoporosis)
- Loss of menstrual cycle (in women)
- Female Athlete Triad (in women)
- Relative Energy Deficiency in Sport (RED-S)
- Persistent muscle soreness
- Chronic bone & joint pain
- Increased incidence of injury (overuse injuries, stress fractures, etc.)
- Persistent fatigue and sluggishness
- Altered resting heart rate
- Increased frequency of illness & upper respiratory infections

- **Learn more about health consequences >**
- **Learn more about eating disorders statistics >**

NEDA WEBSITE . AUG 2020

https://www.nationaleatingdisorders.org/health-consequences

Eating disorders are serious, potentially life-threatening conditions that affect a person's emotional and physical health. They are not just a "fad" or a "phase." People do not just "catch" an eating disorder for a period of time. They are real, complex, and devastating conditions that can have serious consequences for health, productivity, and relationships.

Eating disorders can affect every organ system in the body, and people struggling with an eating disorder need to seek professional help. The earlier a person with an eating disorder seeks treatment, the greater the likelihood of physical and emotional recovery.

COMMON HEALTH CONSEQUENCES OF EATING DISORDERS

CARDIOVASCULAR SYSTEM

- Consuming fewer calories than you need means that the body breaks down its own tissue to use for fuel. Muscles are some of the first organs broken down, and the most important muscle in the body is the heart. Pulse and blood pressure begin to drop as the heart has less fuel to pump blood and fewer cells to pump with. The risk for heart failure rises as the heart rate and blood pressure levels sink lower and lower.
  - Some physicians confuse the slow pulse of an athlete (which is due to a strong, healthy heart) with the slow pulse of an eating disorder (which is due to a malnourished heart). If there is concern about an eating disorder, consider low heart rate to be a symptom.
- Purging by vomiting or laxatives depletes your body of important chemicals called electrolytes. The electrolyte potassium plays an important role in helping the heart beat and muscles contract, but is often depleted by purging. Other electrolytes, such as sodium and chloride, can also become imbalanced by purging or by drinking excessive amounts of water. Electrolyte imbalances can lead to irregular heartbeats and possibly heart failure and death.
- Reduced resting metabolic rate, a result of the body's attempts to conserve energy.

GASTROINTESTINAL SYSTEM

- Slowed digestion known as gastroparesis. Food restriction and/or purging by vomiting interferes with normal stomach emptying and the digestion of nutrients, which can lead to:
  - Stomach pain and bloating
  - Nausea and vomiting
  - Blood sugar fluctuations
  - Blocked intestines from solid masses of undigested food
  - Bacterial infections
  - Feeling full after eating only small amounts of food
- Constipation, which can have several causes:

- Inadequate nutritional intake, which means there's not enough in the intestines for the body to try and eliminate
- Long-term inadequate nutrition can weaken the muscles of the intestines and leave them without the strength to propel digested food out of the body
- Laxative abuse can damage nerve endings and leave the body dependent on them to have a bowel movement
- Binge eating can cause the stomach to rupture, creating a life-threatening emergency.
- Vomiting can wear down the esophagus and cause it to rupture, creating a life-threatening emergency.
- Frequent vomiting can also cause sore throats and a hoarse voice.
- When someone makes themselves vomit over a long period of time, their salivary (parotid) glands under the jaw and in front of the ears can get swollen. This can also happen when a person stops vomiting.
- Both malnutrition and purging can cause pancreatitis, an inflammation of the pancreas. Symptoms include pain, nausea, and vomiting.
- Intestinal obstruction, perforation, or infections, such as:
- Mechanical bowel problems, like physical obstruction of the intestine, caused by ingested items.
- Intestinal obstruction or a blockage that prevents food and water from passing through the intestines.
- Bezoar, a mass of indigestible material found trapped in the gastrointestinal tract (esophagus, stomach, or intestines).
- Intestinal perforation, caused by the ingestion of a nonfood item that creates a hole in the wall of the stomach, intestines or bowels.
- Infections such as toxoplasmosis and toxocariasis may occur because of ingesting feces or dirt.
- Poisoning, such as heavy metal poisoning caused by the ingestion of lead-based paint.

NEUROLOGICAL

- Although the brain weighs only three pounds, it consumes up to one-fifth of the body's calories. Dieting, fasting, self-starvation, and/or erratic eating means the brain isn't getting the energy it needs, which can lead to obsessing about food and difficulties concentrating.
- Extreme hunger or fullness at bedtime can create difficulties falling or staying asleep.
- The body's neurons require an insulating, protective layer of lipids to be able to conduct electricity. Inadequate fat intake can damage this protective layer, causing numbness and tingling in hands, feet, and other extremities.
- Neurons use electrolytes (potassium, sodium, chloride, and calcium) to send electrical and chemical signals in the brain and body. Severe dehydration and electrolyte imbalances can lead to seizures and muscle cramps.
- If the brain and blood vessels can't push enough blood to the brain, it can cause fainting or dizziness, especially upon standing.

- Individuals of higher body weights are at increased risk of sleep apnea, a disorder in which a person regularly stops breathing while asleep.

ENDOCRINE

- The body makes many of its needed hormones with the fat and cholesterol we eat. Without enough fat and calories in the diet, levels of hormones can fall, including:
  - Sex hormones estrogen and testosterone
  - Thyroid hormones
- Lowered sex hormones can cause menstruation to fail to begin, to become irregular, or to stop completely.
- Lowered sex hormones can significantly increase bone loss (known as osteopenia and osteoporosis) and the risk of broken bones and fractures.
- Reduced resting metabolic rate, a result of the body's attempts to conserve energy.
- Over time, binge eating can potentially increase the chances that a person's body will become resistant to insulin, a hormone that lets the body get energy from carbohydrates. This can lead to Type 2 Diabetes.
- Without enough energy to fuel its metabolic fire, core body temperature will drop and hypothermia may develop.
- Starvation can cause high cholesterol levels, although this is NOT an indication to restrict dietary fats, lipids, and/or cholesterol.

OTHER HEALTH CONSEQUENCES

- Low caloric and fat consumption can cause dry skin, and hair to become brittle and fall out.
- To conserve warmth during periods of starvation, the body will grow fine, downy hair called lanugo.
- Severe, prolonged dehydration can lead to kidney failure.
- Inadequate nutrition can decrease the number of certain types of blood cells.
- Anemia develops when there are too few red blood cells or too little iron in the diet. Symptoms include fatigue, weakness, and shortness of breath.
- Malnutrition can also decrease infection-fighting white blood cells.

MORTALITY AND EATING DISORDERS

While it is well known that anorexia nervosa is a deadly disorder, the death rate varies considerably between studies. This variation may be due to length of follow-up, or ability to find people years later, or other reasons. In addition, it has not been certain whether other subtypes of eating disorders also have high mortality. Several recent papers have shed new light on these questions by using large samples followed up over many years. Most importantly, they get around the problem of tracking people over time by using national registries which report when people die. A paper by Papadopoulos studied more than 6000 individuals with AN over 30 years using Swedish registries. Overall people with anorexia nervosa had a six fold increase in mortality compared to the general population.

Reasons for death include starvation, substance abuse, and suicide. Importantly the authors also found an increase rate of death from 'natural' causes, such as cancer.

It has not been certain whether mortality rates are high for other eating disorders, such as bulimia nervosa and eating disorder not otherwise specified, the latter of which is the most common eating disorder diagnosis. Crow and colleagues studied 1,885 individuals with anorexia nervosa (N=177), bulimia nervosa (N=906), or eating disorder not otherwise specified (N=802) over 8 to 25 years. The investigators used computerized record linkage to the National Death Index, which provides vital status information for the entire United States, including cause of death extracted from death certificates. Crow and colleagues found that crude mortality rates were 4.0% for anorexia nervosa, 3.9% for bulimia nervosa, and 5.2% for eating disorder not otherwise specified. They also found a high suicide rate in bulimia nervosa. The elevated mortality risks for bulimia nervosa and eating disorder not otherwise specified were similar to those for anorexia nervosa.

In summary, these findings underscore the severity and public health significance of all types of eating disorders.

Special thank you to Walter Kaye, MD, Professor of Psychiatry, Director, UCSD Eating Disorder Research and Treatment Program, University of California, San Diego

NEDA TOOLKIT for Parents

Level of Care Guidelines for Patients

Medical necessity criteria continue to change over time and can differ between insurance companies. This American Psychiatric Association chart will give you a good sense of the levels of care, but consumers should be aware that weight, co-occurring conditions, and motivation for change are all considered when clinical programs and insurance consider level of care.

These guidelines are intended for use by treatment professionals in determining appropriate level of care. Please feel free to print and distribute to clinicians, insurance officials, and others involved in these decisions with your loved one.

American Psychiatric Association Level of Care Guidelines for Patients with Eating Disorders

	Level One: Outpatient	Level Two: Intensive Outpatient	Level Three: Partial Hospitalization (Full-day Outpatient Care)	Level Four: Residential Treatment	Level Five: Inpatient Treatment
Medical Status	Medically stable to the extent that more extensive medical monitoring, as defined in levels 4 and 5, is not required			Medically stable to the extent that intravenous fluids, nasogastric tube feedings, or multiple daily laboratory tests are not needed	*For adults:* Heart rate <40 bpm; blood pressure <90/60 mmHg; glucose <60 mg/dl; potassium <3 mEq/L; electrolyte imbalance; temperature <97.0°F; dehydration; liver, kidney, or cardiac compromise requiring acute treatment; poorly controlled diabetes *For children and adolescents:* Heart rate near 40 bpm; orthostatic blood pressure changes (>20 bpm increase in heart rate or >10 mmHg to 20 mmHg drop); blood pressure <80/50 mmHg; low potassium, phosphate, or magnesium levels

	Level One: Outpatient	*Level Two: Intensive Outpatient*	*Level Three: Partial Hospitalization (Full-day Outpatient Care)*	*Level Four: Residential Treatment*	*Level Five: Inpatient Treatment*
Suicidality	If suicidality is present, inpatient monitoring and treatment may be needed depending on the estimated level of risk				Specific plan with high lethality or intent; admission may also be indicated in patient with suicidal ideas or after a suicide attempt or aborted attempt, depending on the presence or absence of other factors modulating suicide risk
Weight as percentage of healthy body weight	Generally >85%	Generally >80%	Generally >80%	Generally <85%	Generally <85%; acute weight decline with food refusal even if not <85% of healthy body weight
Motivation to recover, including co-operativeness, insight, and ability to control obsessive thoughts	Fair-to-good motivation	Fair motivation	Partial motivation; cooperative; patient preoccupied with intrusive, repetitive thoughts >3 hours/day	Poor-to-fair motivation; patient preoccupied with intrusive repetitive thoughts 4–6 hours a day; patient cooperative with highly structured treatment	Very poor to poor motivation; patient preoccupied with intrusive repetitive thoughts; patient uncooperative with treatment or cooperative only in highly structured environment
Co-occurring disorders (substance use, depression, anxiety)	Presence of comorbid condition may influence choice of level of care				Any existing psychiatric disorder that would require hospitalization (i.e., severe depression, addiction, self-harm)
Structure needed for eating/gaining weight	Self-sufficient	Self-sufficient	Needs some structure to gain weight	Needs supervision at all meals or will restrict eating	Needs supervision during and after all meals or nasogastric/ special feeding modality
Ability to control compulsive exercising	Can manage compulsive exercising through self-control	Some degree of external structure beyond self-control required to prevent patient from compulsive exercising; rarely a sole indication for increasing the level of care			

	Level One: Outpatient	*Level Two: Intensive Outpatient*	*Level Three: Partial Hospitalization (Full-day Outpatient Care)*	*Level Four: Residential Treatment*	*Level Five: Inpatient Treatment*
Purging behavior (laxatives and diuretics)	Can greatly reduce incidents of purging in an unstructured setting; no significant medical complications, such as cardiac or other abnormalities, suggesting the need for hospitalization			Can ask for and use support from others or use cognitive and behavioral skills to inhibit purging	Needs supervision during and after all meals and in bathrooms; unable to control multiple daily episodes of purging that are severe, persistent, and disabling, despite trials of outpatient care, even if routine laboratory test results reveal no obvious abnormalities
Environmental stress	Others able to provide adequate emotional and practical support and structure		Others able to provide at least limited support and structure	Severe family conflict or problems or absence of family so patient is unable to receive structured treatment in home; patient lives alone without adequate support system	
Geographic availability of treatment program	Patient lives near treatment setting			Treatment program is too distant for patient to participate from home	