



---

# 10.4

## ANOREXIA NERVOSA

---

**Anorexia Nervosa** is characterized by 1) persistent refusal to maintain body weight; 2) fears of gaining weight or becoming fat, or behavior that interferes with weight gain; and 3) a disturbance in self-perceived weight or shape. A person with Anorexia Nervosa maintains a weight that is significantly below normal for the person’s age, sex, developmental stage, and physical health. The individual has either lost a significant amount of weight or failed to make expected weight gains (in the case of a child or adolescent), either through dieting, fasting, and excessive exercise (noted with the subtype Restricting Type) or, if also engaging in eating binges, through self-induced vomiting or misuse of laxatives, diuretics, or enemas (noted with the subtype Binge-Eating/Purging Type). The fear of gaining weight or becoming fat often persists, or even increases, as weight is lost. Some individuals with Anorexia Nervosa deny a fear of becoming fat but do things to interfere with maintaining their weight, such as engaging in self-starvation. Some people with Anorexia Nervosa feel fat all over, whereas others focus on specific parts of their bodies—commonly their abdomens, buttocks, or thighs—which they insist are “fat,” and they are constantly weighing and measuring themselves and checking their appearance in a mirror. Weight loss is perceived as a sign of self-control; weight gain is a failure. Those who acknowledge that they are thin often deny the medical seriousness of their condition.

The 12-month prevalence of Anorexia Nervosa in young females is approximately 0.4%. Anorexia Nervosa is estimated to be 10 times more common in females than in males. It usually begins during adolescence or young adulthood. It is an extremely serious condition and can be life-threatening, because malnutrition impacts many of the body’s major organ systems. Obsessive-compulsive behaviors surrounding food and other issues are common. A diagnosis of Obsessive-Compulsive Disorder (see

“Thin Tim,” later in this section) is made if the obsessions and compulsions are not related to food, body shape, or weight. Cultural values of “thinness,” and occupations and avocations that encourage thinness, such as modeling and some athletics, may contribute to the risk for Anorexia Nervosa.

---

## SIXTY-SEVEN POUND WEAKLING

---

When Peggy Sims was first evaluated for admission to an inpatient eating disorders program, she was a 20-year-old woman who had difficulty supporting her 5’3” body with a weight of only 67 pounds. She had begun to lose weight 4 years earlier, initially dieting to lose an unwanted 6 pounds. Encouraged by compliments on her new body, she proceeded to lose 8 more pounds. Over the next 2 years, she continued to lose weight and increased her physical activity until her weight reached a low of 64 pounds; she stopped menstruating. She was admitted to a medical unit, treated for peptic ulcer disease, and discharged, only to be admitted 3 months later to the psychiatric unit of a general hospital. During that 8-week hospitalization, her weight increased from 84 to 100 pounds. She did well until she went off to college, where, with increased academic and social demands, she again began to diet until she weighed only 67 pounds. She reported that she had become troubled by changes in her body when she was heavier, and she became increasingly anxious as her figure developed. Her eating habits were ritualized: she cut food into very small pieces, moved them around on the plate, and ate very slowly. She resisted eating foods with high fat and carbohydrate content. She was forced to drop out of school and to accept another hospitalization.

Peggy was motivated to comply with treatment, but her fears of gaining weight and becoming obese affected her progress. She was expected to gain a minimum of 2 pounds every week, and she was restricted to bed rest if she failed to gain sufficient weight. In psychotherapy, Peggy was gradually guided to discuss her feelings and to actually look at herself in the mirror. She was initially instructed to look at one part of her body for a minimum of 10 seconds, and the time was progressively increased until she could look at her whole body without any anxiety. Her menses returned at a weight of 93 pounds.

After 7 months of individual and family treatment, she was discharged at a weight of 100 pounds. Peggy returned to college, worked part time, and lived with her parents.

Over the next 10 years, Peggy graduated from college with a degree in nutrition and was selected to do an internship with a major corporation. She has excelled in her work, receiving several promotions. She

married, but the relationship deteriorated as her husband became physically abusive. She moved out, obtained a court order of protection, and eventually was divorced. Her most recent correspondence told of her return to graduate school (all expenses paid and full salary), a new romance, and success in a marathon (third place in a 26-mile race). She has maintained her weight around 116 pounds and menstruates normally. She did seek counseling to sort out issues related to her broken marriage and her estrangement from her sister, which has since resolved. She describes her life now as full and satisfying.

#### *Discussion of “Sixty-Seven Pound Weakling”*

As is usually the case with Anorexia Nervosa (DSM-5, p. 338), the characteristic signs and symptoms leave little doubt as to the correct diagnosis. Peggy has all of the salient features, including refusal to maintain body weight at or above a minimally normal weight for age and height; intense fear of gaining weight or of becoming fat, even though underweight; and disturbance in the way in which her body weight or shape is experienced (anxiety when viewing her body). She also has the common but not universal sign (in postmenarchal females) of amenorrhea. Amenorrhea in Anorexia Nervosa is believed to be caused by underactivity of hypothalamic and pituitary gland hormones due to stress or nutritional factors, which in turn lead to underactivity of ovarian hormones responsible for the menstrual cycle. Because Peggy’s method of losing weight has never involved purging (self-induced vomiting or use of laxatives or diuretics) and she has never engaged in binge eating (consumption of large amounts of food with a sense of loss of control), the subtype is the Restricting Type.

Peggy exhibited compulsive ritualistic behavior surrounding food (e.g., cutting her food into very small pieces and moving it around on her plate before eating it), a feature commonly seen in patients with Anorexia Nervosa. Although her compulsive eating behavior might suggest the possible additional diagnosis of Obsessive-Compulsive Disorder (see “Lady Macbeth” in Section 6.1), a separate diagnosis is not given because her compulsive behavior only involves food and is thus explained by the diagnosis of Anorexia Nervosa.

Anorexia Nervosa is a serious and often life-threatening disorder. This case illustrates that with expert treatment, a good outcome is possible.

---

## CLOSE TO THE BONE

---

A 23-year-old woman from Arkansas wrote a letter to the head of a New York research group after seeing a television program in which he described his work with patients with unusual eating patterns. In the letter, which requested that she be accepted into his program, the woman described her problems as follows:

Several years ago, in college, I started using laxatives to lose weight. I started with a few and increased the number as they became ineffective. After 2 years I was taking 250–300 Ex-Lax pills at one time with a glass of water, 20 per gulp. I would lose as much as 20 pounds in a 24-hour period, mostly water and some food, so dehydrated that I couldn't stand, and could barely talk. I ended up in the university infirmary several times with diagnoses of food poisoning, severe gastrointestinal flu, etc., with bland diets and medications. I was released within a day or two. A small duodenal ulcer appeared and disappeared on X-rays in 1975.

I would not eat for days, then would eat something, and, overcome by guilt at eating, and hunger, would eat-eat-eat. A girl on my dorm floor told me that she occasionally forced herself to vomit so that she wouldn't gain weight. I did this every once in a while and discovered that I could consume large amounts of food, vomit, and still lose weight. This was spring of 1975. I lost nearly 50 pounds over a few months, to 90 pounds. My hair started coming out in handfuls, and my teeth were loose.

I never felt lovelier or more confident about my appearance: physically liberated, streamlined, close to the bone. I was flat everywhere except my stomach when I binged, when I would be full-blown and distended. When I bent over, each rib and back vertebra was outlined. After vomiting, my stomach was once more flat, empty.

The more I lost, the more I was afraid of getting fat. I was afraid to drink water for days at a time because it would add pounds on the scale and make me miserable.

Yet I drank (or drink; perhaps I should be writing this all in the present tense) easily a half-gallon of milk and other liquids at once when bingeing. I didn't need the laxatives as much to get rid of food and eventually stopped using them altogether (although I am still chronically constipated, I become nauseous whenever I see them in the drugstore).

I exercised for hours each day to tone my figure from the weight fluctuations, and joined the university track team. I wore track shoes all the time and ran to classes and around town, stick-legs pumping. I went to track practice daily after being sick, until I was forced to quit; a single lap would make me dizzy, with cramps in my stomach and legs.

At some point during my last semester before dropping out I came across an article on anorexia

nervosa. It frightened me; my own personal obsession with food and body weight was shared by other people. I had not menstruated in 2 years. So, I forced myself to eat and digest healthy food. Hated it. I studied nutrition and gradually forced myself to accept a new attitude toward food—vitalizing—something needed for life. I gained weight, fighting panic. In a rigid, controlled way I have maintained myself nutritionally ever since: 105–115 pounds at 5'6". I know what I need to survive and I eat it—a balanced diet with the fewest possible calories, mostly vegetables, fruits, fish, fowl, whole grain products, etc. In 5 years I have not eaten anything like pizza, pastas or pork, sweets, or anything fattening, fried or rich without being very sick. Once I allowed myself an ice cream cone. But I am usually sick if I deviate as much as one bite.

It was difficult for me to face people at school, and I dropped courses each semester, collecting incompletes but finishing well in the few classes I stayed with. The absurdity of my reclusiveness was even evident to me during my last semester when I signed up for correspondence courses, while living only two blocks from the correspondence university building on campus. I felt I would only be able to face people when I lost “just a few more pounds.”

Fat. I cannot stand it. This feeling is stronger and more desperate than any horror at what I am doing to myself. If I gain a few pounds I hate to leave the house and let people see me. Yet I am sad to see how I have pushed aside the friends, activities, and state of energized health that once rounded my life.

For all of this hiding, it will surprise you to know that I am by profession a model.

Last year when I was more in control of my eating-vomiting I enjoyed working in front of a camera, and I was doing well. Lately I've been sick too much and feel outof-shape and physically unselfconfident for the discipline involved. I keep myself supported during this time with part-time secretarial work, and whatever unsolicited photo bookings my past clients give me. For the most part I do the secretarial work. And I can't seem to stop being sick all of the time.

The more I threw up when I was in college, the longer it took, and the harder it became. I needed to use different instruments to induce vomiting. Now I double two electrical cords and shove them several feet down into my throat. This is preceded by 6–10 doses of ipecac [an emetic]. My knees are calloused from the time spent kneeling sick. The eating-vomiting process takes usually 2–3 hours, sometimes as long as 8. I dread the gagging and pain and sometimes my throat is very sore and I procrastinate using the ipecac and cords. I sit on the floor, biting my nails, and pulling the skin off around my nails with tweezers. Usually I wear rubber gloves to prevent this somewhat.

After emptying my stomach completely I wash thoroughly. In a little while I will hydrate myself with a bottle of diet pop, and take a handful of Lasix 40 mg [a diuretic] (which I have numerous prescriptions for). Sometimes I am faint, very cold.

I splash cool water on my face, smooth my hair, but my hands are shaking some. I will take aspirin if my hands hurt sharply...so I can sleep later. My lips, fingers are bluish and cold. I see in the mirror that blood vessels are broken. There are red spots over my eyes. They always fade in a day or two. There is a certain relief when it is over, that the food is gone, and I am not horribly fat from it. And I cry often...for some rest, some calm. It is foolish for me to cry for someone, someone to help me; when it is only me who is hiding and hurting myself.

Now there is a funny new split in my behavior, this honesty about my illness. Hopefully it will bring me more help than humiliation. Sometimes I feel hypocrisy in my actions, and in the frightened, well-ordered attempts to seek out help. All the while I am still sick, night after night after night. And often days as well.

Two sets of logic seem to be operating against each other, each determined, each half-canceling the effects of the other. It is the part of me which forced me to eat that I'm talking about...which cools my throat with water after hours of heaving, which takes potassium supplements to counteract diuretics, and aspirin for torn hands. It is this part of me, which walks into a psychiatrist's office twice weekly and sees the liability of hurting myself seriously, which makes constant small efforts to repair the tearing-down.

It almost sounds as if I am being brutalized by some unrelenting force. Ridiculous to feel this way, or to stand and cry, because the hands that cool my throat and try to make small repairs only just punched lengths of cord into my stomach. No demons, only me.

For your consideration, I am

Gratefully yours,

Nancy Lee Duval

Ms. Duval was admitted to the research ward for study. Additional history revealed that her eating problems began gradually during her adolescence, and had been severe for the past 3–4 years. At age 14, she weighed 128 pounds and had reached her adult height of 5'6". She felt "terribly fat" and began to diet without great success. At age 17 she weighed 165 pounds and began to diet more seriously for fear that she would be ridiculed, and went down to 130 pounds over the next year. She recalled feeling very depressed, overwhelmed, and insignificant. She began to avoid difficult classes so that she would never get less than straight As, and began to lie about her school and grade performance for fear of being humiliated. She had great social anxiety in dealing with boys, which culminated in her transferring to a girls' school for the last year of high school.

When she left for college, her difficulties increased. She had trouble deciding how to organize her time, whether to study, to date, or to see friends. She became more desperate to lose weight and began to

use laxatives, as she describes in her letter. At age 20, in her sophomore year of college, she reached her lowest weight of 88 pounds (70% of ideal body weight) and stopped menstruating.

As Ms. Duval describes in her letter, she recognized that there was a problem and eventually forced herself to gain weight. Nonetheless, the overeating and vomiting she had begun the previous year worsened. As she was preoccupied with her weight and her eating, her school performance suffered, and she dropped out of school midway through college at age 21.

Ms. Duval is the second of four children and the only girl. She comes from an uppermiddle-class professional family. From the patient's description, it sounds as though the father has a history of alcoholism. There are clear indications of difficulties between the mother and the father, and between the boys and the parents, but no other family member has ever had psychiatric treatment.

Ms. Duval remained on the research ward for several weeks, during which time she participated in research studies and, under the structure of the hospital setting, was able to give up her abuse of laxatives and diuretics. After her return home, she continued in treatment with a psychiatrist in psychoanalytically-oriented psychotherapy two times a week, which she had begun 6 months previously. That therapy continued for approximately another 6 months, when her family refused to support it. The patient also felt that while she had gained some insight into her difficulties, she had been unable to change her behavior.

Two years after leaving the hospital, she wrote that she was "doing much better." She had reenrolled in college, and was completing her course work satisfactorily. She had seen a nutritionist, and felt that form of treatment was useful for her in learning what a normal diet was and how to maintain a normal weight. She was also receiving counseling from the school guidance counselors, but she did not directly relate that to her eating difficulties. Her weight was normal and she was menstruating regularly. She continued to have intermittent difficulty with binge eating and vomiting, but the frequency and severity of these problems were much reduced. She no longer abused diuretics or laxatives.

### *Discussion of "Close to the Bone"*

Ms. Duval is suffering from Anorexia Nervosa (DSM-5, p. 338), a disorder that was first described 300 years ago and given its current name in 1868. Although theories about the cause of the disorder have come and gone, the essential features have remained unchanged. Ms. Duval poignantly describes these features.

She had an intense and irrational fear of becoming obese, even when she was emaciated. Her body image was disturbed in that she perceived herself as fat when her weight was average and that she “never felt lovelier” when, to others, she must have appeared grotesquely thin. She lost about 30% of her body weight through relentless dieting and exercising, self-induced vomiting, and use of cathartics and diuretics. She had not menstruated for the past 3 years.

Significantly, Ms. Duval’s dieting takes place despite persistent hunger; thus, the word anorexia (meaning “loss of appetite”) makes the name of the disorder a misnomer. In fact, she also has recurrent episodes of binge eating—that is, rapid, uncontrolled consumption of high-caloric foods. These binges are followed by vomiting and remorse. This pattern of recurrent binge eating and purging, if it occurred by itself, would warrant the diagnosis of Bulimia Nervosa (see Section 10.5). However, when it occurs during the course of Anorexia Nervosa, the appropriate diagnosis is Anorexia Nervosa, Binge-Eating/Purging Type. Thus, Ms. Duval’s condition differs from that in the previous case of this section (see “Sixty-Seven Pound Weakling”) because Ms. Duval periodically went on eating binges (would “eat-eat-eat”) and engaged in compensatory purging behaviors to try to lose weight, whereas the other patient tried to lose weight strictly by reducing her intake of food.

When an emaciated patient with Anorexia Nervosa insists that she is fat, this suggests the presence of a somatic delusion, as might be seen in a Delusional Disorder (see “Fleas” in Section 2.4) or Major Depressive Disorder (see “Stonemason” in Section 4.2). However, such a patient is generally not considered to have a delusion because she is describing how she experiences herself rather than disputing the facts of her weight.