

# How eating disorders can damage the heart

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Every 52 minutes, someone in the U.S. dies from an eating disorder. Some of those deaths will be from cardiovascular complications.

"The heart is severely affected by weight loss and malnutrition," said Dr. Philip Mehler, founder and medical director of the ACUTE Center for

Eating Disorders and Severe Malnutrition in Denver. "The more severe the disorder, the more likely the person will have cardiac complications."

Common eating disorders include anorexia and bulimia, both of which involve an obsession with weight and distorted [body image](#). People with anorexia avoid or severely restrict food and may exercise relentlessly. People with bulimia typically purge after binge eating by vomiting or using laxatives or diuretics. Some people with anorexia also binge eat.

Two more recently defined eating disorders are binge eating disorder and avoidant/restrictive food intake disorder, which affect eating behaviors but do not include body image obsessions.

Eating disorders can cause changes to the heart that result in higher lifelong cardiovascular health risks. This is largely due to malnutrition in people with anorexia and [electrolyte imbalances](#) in people with bulimia.

Dr. Riti Patel, a cardiologist at the Lankenau Heart Institute Mainline Health in Philadelphia, said eating disorders can cause various cardiovascular issues, ranging from a slowed heart rate to [heart failure](#).

"The eating disorder is quite severe if these things happen," she said.

Different eating disorders affect the heart differently, said Mehler, who also is a professor of medicine at the University of Colorado School of Medicine. In people with anorexia, malnutrition and [weight loss](#) can cause the heart muscle to shrink and the heart rate to slow, a condition known as bradycardia in which the heart rate is less than 60 beats per minute at rest. Anorexia also can cause other abnormal heart rhythms.

"When a person of any body size restricts food intake, oftentimes they develop a slow heart rate," said Dr. Jennifer Gaudiani, founder and medical director of the Gaudiani Clinic in Denver. "This is because the

body has slowed the metabolism."

"The heart atrophies," Mehler said. "It slows down like a bear that's hibernating. And that can turn into dangerous rhythms."

"Essentially," Gaudiani said, "the body doesn't want to use any additional calories for extra heartbeats at rest."

People with anorexia have the second-highest mortality risk of all psychiatric conditions, according to a [2023 review article](#) published in the *Journal of Eating Disorders*. Overall, people hospitalized for eating disorders may be five to seven times more likely to die than the general population, according to a [2020 Canadian study](#) published in the *British Journal of Psychiatry*.

The excessive vomiting and use of laxatives associated with bulimia can lead to an electrolyte imbalance that raises the risk for abnormal heart rhythms. Damage done to the heart from bulimia also can lead to congestive heart failure and sudden cardiac death.

Some people with bulimia also take ipecac to induce vomiting, which can be toxic to the heart, Mehler said. It can lead to cardiomyopathy—when the heart muscle becomes enlarged, thick or rigid—and heart failure.

Gaudiani said she also sees many people with eating disorders come into her clinic with postural orthostatic tachycardia syndrome, or POTS, which occurs when there's a reduced volume of blood returning to the heart upon standing. It is characterized by a rapid heartbeat, dizziness, lightheadedness, heart palpitations and other symptoms.

Although eating disorders can affect people of any age or gender, [teenage girls](#) and women in their 20s have the highest rates in the U.S.,

according to a [2020 report](#) from several groups that included the Strategic Training Initiative for the Prevention of Eating Disorders at the Harvard T.H. Chan School of Public Health and Boston Children's Hospital. An estimated 28.8 million people in the U.S. will have an eating disorder at some point in their life.

Parents and other concerned loved ones should watch for signs that someone is obsessed with their weight, obsessively exercising, routinely leaving the table during a meal to use the bathroom or wearing baggy clothes to hide how gaunt they've become, Mehler said.

Signs and symptoms that someone's eating disorder may be causing heart problems include lightheadedness, chest pain, shortness of breath, frequent nose bleeds and a lack of energy, he said.

Research shows the COVID-19 pandemic drove an increase in eating disorders, due in part to increased social isolation and restricted access to care.

"The jury is in, and it's clear that COVID was not kind to those with a proclivity toward eating disorders," Mehler said. "The isolation was bad for them. They were cooped up all day looking at the fridge and the mirror. If body weight is all of your focus, you had more time to focus on it because you were not going out and interacting with the world."

Gaudiani said her clinic saw an increase in people seeking care during the pandemic.

"There was so much out of our control that for those susceptible to trying to find stability and/or comfort through food, the pandemic presented kindling to light or exacerbate the flame of the eating disorder," she said.

People who have cardiovascular complications need medical attention for their heart issues, which can be life-threatening, but must be treated simultaneously for their eating disorder, Patel said.

"You have to treat the underlying disorder," she said.

Bringing someone with an eating disorder back to a healthy weight can resolve structural changes to the heart caused by malnutrition, but it must be done cautiously, Mehler said. People who are severely malnourished are at high risk for refeeding syndrome, which occurs when nutrition is reintroduced too quickly. It can be fatal.

It's also important not to blame people for developing an eating disorder, Mehler said. "These are not disorders of choice, and we need to recognize this. There's a genetic component. If a parent had it, there's a high chance of their children developing it as well."

The severity of an eating disorder will dictate the kind of help a person needs, he said.

"If you have a mild eating disorder, get to a high school counselor or therapist," Mehler said. "If more severe, call an [eating disorder](#) center. And if it is extreme, get into a hospital that has expertise and proficiency in this area."

Provided by American Heart Association

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