

What Are Eating Disorders?



National Eating Disorders Association

Eating disorders are real, complex, and devastating conditions that can have serious consequences for health, productivity, and relationships. They are not a fad, phase or lifestyle choice. Eating disorders are serious, potentially life-threatening conditions that affect a person's emotional and physical health.

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.

In the United States, 20 million women and 10 million men suffer from a clinically significant eating disorder at some time in their life, including anorexia nervosa, bulimia nervosa, binge eating disorder, or an eating disorder not otherwise specified (EDNOS) (Wade, Keski-Rahkonen, & Hudson, 2011).

For various reasons, many cases are likely not to be reported. In addition, many individuals struggle with body dissatisfaction and sub-clinical disordered eating attitudes and behaviors, and the best-known contributor to the development of anorexia nervosa and bulimia nervosa is body dissatisfaction (Stice, 2002).

By age 6, girls especially start to express concerns about their own weight or shape. 40-60% of elementary school girls (ages 6-12) are concerned about their weight or about becoming too fat. This concern endures through life (Smolak, 2011).

Health Consequences, Including Mortality

In anorexia nervosa's cycle of self-starvation, the body is denied the essential nutrients it needs to function normally. Thus, the body is forced to slow down all of its processes to conserve energy, resulting in:

- Abnormally slow heart rate and low blood pressure, which mean that the heart muscle is changing. The risk for heart failure rises as the heart rate and blood pressure levels sink lower and lower.
- Reduction of bone density (osteoporosis), which results in dry, brittle bones.
- Muscle loss and weakness.
- Severe dehydration, which can result in kidney failure.

- Fainting, fatigue, and overall weakness.
- Dry hair and skin; hair loss is common.
- Growth of a downy layer of hair—called lanugo—all over the body, including the face, in an effort to keep the body warm.

A review of nearly fifty years of research confirms that anorexia nervosa has the highest mortality rate of any psychiatric disorder (Arcelus, Mitchell, Wales, & Nielsen, 2011). For females between fifteen to twenty-four years old who suffer from anorexia nervosa, the mortality rate associated with the illness is twelve times higher than the death rate of all other causes of death (Sullivan, 1995).

The recurrent binge-and-purge cycles of bulimia can affect the entire digestive system and can lead to electrolyte and chemical imbalances in the body that affect the heart and other major organ functions. Health consequences include:

- Electrolyte imbalances that can lead to irregular heartbeats and possibly heart failure and death.
- Electrolyte imbalance is caused by dehydration and loss of potassium, sodium and chloride from the body as a result of purging behaviors.
- Potential for gastric rupture during periods of bingeing.
- Inflammation and possible rupture of the esophagus from frequent vomiting.
- Tooth decay and staining from stomach acids released during frequent vomiting.
- Chronic irregular bowel movements and constipation as a result of laxative abuse.
- Peptic ulcers and pancreatitis.

Binge eating disorder often results in many of the same health risks associated with clinical obesity, including:

- High blood pressure.
- High cholesterol levels.
- Heart disease as a result of elevated triglyceride levels.
- Type II diabetes mellitus.
- Gallbladder disease.

Did You Know?

- The rate of development of new cases of eating disorders has been increasing since 1950 (Hudson et al., 2007; Streigel-Moore & Franko, 2003; Wade et al., 2011).
- There has been a rise in incidence of anorexia in young women 15-19 in each decade since 1930 (Hoek & van Hoeken, 2003).
- The incidence of bulimia in 10-39 year old women TRIPLED between 1988 and 1993 (Hoek & van Hoeken, 2003).
- The prevalence of eating disorders is similar among Non-Hispanic Whites, Hispanics, African-Americans, and Asians in the United States, with the exception that anorexia nervosa is more common among Non-Hispanic Whites (Hudson et al., 2007; Wade et al., 2011).
- It is common for eating disorders to occur with one or more other psychiatric disorders, which can complicate treatment and make recovery more difficult. Among those who suffer from eating disorders:
 - Alcohol and other substance abuse disorders are 4 times more common than in the general populations (Harrop & Marlatt, 2010).
 - Depression and other mood disorders co-occur quite frequently (Mangweth et al., 2003; McElroy, Kotwal, & Keck, 2006).
 - There is a markedly elevated risk for obsessive-compulsive disorder (Altman & Shankman, 2009).

Prevalence vs. Funding

Despite the prevalence of eating disorders, they continue to receive inadequate research funding.

Illness	Prevalence	NIH Research Funds (2011)
Alzheimer's Disease	5.1 million	\$450,000,000
Autism	3.6 million	\$160,000,000
Schizophrenia	3.4 million	\$276,000,000
Eating disorders	30 million	\$28,000,000

Research dollars spent on Alzheimer's Disease averaged \$88 per affected individual in 2011. For Schizophrenia the amount was \$81. For Autism \$44. For eating disorders the average amount of research dollars per affected individual was just \$0.93. (National Institutes of Health, 2011).

National Survey Shows Public Understands Eating Disorders Are Serious Illnesses

In August of 2010, American Viewpoint (a nationally recognized public opinion research company) conducted a telephone survey of American adults for the National Eating Disorders Association. The national survey shows an increased public awareness of eating disorders and a shift in how eating disorders are viewed.

The survey polled a nationwide sample of one thousand adults in the United States. Among the findings were the following:

- 82% percent of respondents believe that eating disorders are a physical or mental illness and should be treated as such, with just 12% believing they are related to vanity.
- 85% of the respondents believe that eating disorders deserve coverage by insurance companies just like any other illness.
- 86% favor schools providing information about eating disorders to students and parents.
- 80% believe conducting more research on the causes and most effective treatments would reduce or prevent eating disorders
- 70% believe encouraging the media and advertisers to use more average sized people in their advertising campaigns would reduce or prevent eating disorders.

Dieting and The Drive For Thinness

Dieting and weight control strategies reflect how dissatisfied an individual is with her or his own body size and shape. Besides being associated with the onset of eating disorders, these behaviors alone can be dangerous to one's health.

- 42% of 1st-3rd grade girls want to be thinner (Collins, 1991).
- In elementary school fewer than 25% of girls diet regularly. Yet those who do know what dieting involves and can talk about calorie restriction and food choices for weight loss fairly effectively (Smolak, 2011; Wertheim et al., 2009).
- 81% of 10 year olds are afraid of being fat (Mellin et al., 1991).
- 46% of 9-11 year-olds are "sometimes" or "very often" on diets, and 82% of their families are "sometimes" or "very often" on diets (Gustafson-Larson & Terry, 1992).
- Over one-half of teenage girls and nearly one-third of teenage boys use unhealthy weight control behaviors such as skipping meals, fasting, smoking cigarettes, vomiting, and taking laxatives (Neumark-Sztainer, 2005).

- 35-57% of adolescent girls engage in crash dieting, fasting, self-induced vomiting, diet pills, or laxatives. Overweight girls are more likely than normal weight girls to engage in such extreme dieting (Boutelle, Neumark-Sztainer, Story, & Resnick, 2002; Neumark-Sztainer & Hannan, 2001; Wertheim et al., 2009).
- Even among clearly non-overweight girls, over 1/3 report dieting (Wertheim et al., 2009).
- Girls who diet frequently are 12 times as likely to binge as girls who don't diet (Neumark-Sztainer, 2005).
- The average American woman is 5'4" tall and weighs 165 pounds. The average Miss America winner is 5'7" and weighs 121 pounds (Martin, 2010).
- The average BMI of Miss America winners has decreased from around 22 in the 1920s to 16.9 in the 2000s. The World Health Organization classifies a normal BMI as falling between 18.5 and 24.9 (Martin, 2010).
- 95% of all dieters will regain their lost weight in 1-5 years (Grodstein, Levine, Spencer, Colditz, & Stampfer, 1996; Neumark-Sztainer, Haines, Wall, & Eisenberg, 2007).
- 35% of "normal dieters" progress to pathological dieting. Of those, 20-25% progress to partial or full-syndrome eating disorders (Shisslak, Crago, & Estes, 1995).
- Of American, elementary school girls who read magazines, 69% say that the pictures influence their concept of the ideal body shape. 47% say the pictures make them want to lose weight (Martin, 2010).

- Altman, S. E., & Shankman, S. A. (2009). What is the association between obsessive-compulsive disorder and eating disorders? *Clinical Psychology Review*, 29, 638-646.
- Arcelus, J., Mitchell, A. J., Wales, J., & Nielsen, S. (2011). Mortality rates in patients with Anorexia Nervosa and other eating disorders. *Archives of General Psychiatry*, 68(7), 724-731.
- Boutelle, K., Neumark-Sztainer, D., Story, M., & Resnick, M. (2002). Weight control behaviors among obese, overweight, and nonoverweight adolescents. *Journal of Pediatric Psychology*, 27, 531-540.
- Cafri, G., Thompson, J. K., Ricciardelli, L., McCabe, M., Smolak, L., & Yesalis, C. (2005). Pursuit of the muscular ideal: Physical and psychological consequences and putative risk factors. *Clinical Psychology Review*, 25, 215-239.
- Collins, M. E. (1991). Body figure perceptions and preferences among pre-adolescent children. *International Journal of Eating Disorders*, 10(2), 199-208.
- Grodstein, F., Levine, R., Spencer, T., Colditz, G. A., & Stampfer, M. J. (1996). Three-year follow-up of participants in a commercial weight loss program: Can you keep it off? *Archives of Internal Medicine* 156(12), 1302.
- Gustafson-Larson, A. M., & Terry, R. D. (1992). Weight-related behaviors and concerns of fourth-grade children. *Journal of American Dietetic Association*, 818-822.
- Harrop, E. N., & Marlatt, G. A. (2010). The comorbidity of substance use disorders and eating disorders in women: prevalence, etiology, and treatment. *Addictive Behaviors*, 35, 392-398.
- Hoek, H. W., & van Hoeken, D. (2003). Review of the prevalence and incidence of eating disorders. *International Journal of Eating Disorders*, 34(4), 383-396.
- Hudson J. I., Hiripi E., Pope H. G. Jr., & Kessler R. C. (2007). The prevalence and correlates of eating disorders in the National Comorbidity Survey Replication. *Biological Psychiatry*, 61, 348-358.
- Mangweth, B., Hudson, J. I., Pope, H. G. Jr., Hausmagn, A., DeCol, C., Laird, N. M., ... Tsuang, M.T. (2003). Family study of the aggregation of eating disorders and mood disorders. *Psychological Medicine*, 33, 1319-1323.
- Martin, J. B. (2010). The Development of Ideal Body Image Perceptions in the United States. *Nutrition Today*, 45(3), 98-100. Retrieved from nursingcenter.com/pdf.asp?AID=1023485.
- McElroy, S. L. O., Kotwal, R., & Keck, P. E. Jr. (2006). Comorbidity of eating disorders with bipolar disorder and treatment implications. *Bipolar Disorders*, 8, 686-695.
- Mellin, L., McNutt, S., Hu, Y., Schreiber, G. B., Crawford, P., & Obarzanek, E. (1997). A longitudinal study of the dietary practices of black and white girls 9 and 10 years old at enrollment: The NHLBI growth and health study. *Journal of Adolescent Health*, 20(1), 27-37.
- National Institutes of Health. (2011). Estimates of Funding for Various Research, Condition, and Disease Categories (RCDC) [Data set]. Retrieved from report.nih.gov/rcdc/categories/
- Neumark-Sztainer, D. (2005). *I'm, Like, SO Fat!*. New York: Guilford.

- Neumark-Sztainer D., Haines, J., Wall, M., & Eisenberg, M. (2007). Why does dieting predict weight gain in adolescents? Findings from project EAT-II: a 5-year longitudinal study. *Journal of the American Dietetic Association*, 107(3), 448-55.
- Neumark-Sztainer, D., & Hannan, P. (2001). Weight-related behaviors among adolescent girls and boys: A national survey. *Archives of Pediatric and Adolescent Medicine*, 154, 569-577.
- Shisslak, C. M., Crago, M., & Estes, L. S. (1995). The spectrum of eating disturbances. *International Journal of Eating Disorders*, 18(3), 209-219.
- Smolak, L. (2011). Body image development in childhood. In T. Cash & L. Smolak (Eds.), *Body Image: A Handbook of Science, Practice, and Prevention* (2nd ed.). New York: Guilford.
- Streigel-Moore R. H., & Franko D. L. (2003). Epidemiology of binge eating disorder. *International Journal of Eating Disorders*, 34, S19-S29.
- Stice, E. (2002). Risk and maintenance factors for eating pathology: A meta-analytic review. *Psychological Bulletin*, 128, 825-848.
- Wade, T. D., Keski-Rahkonen A., & Hudson J. (2011). Epidemiology of eating disorders. In M. Tsuang and M. Tohen (Eds.), *Textbook in Psychiatric Epidemiology* (3rd ed.) (pp. 343-360). New York: Wiley.
- Wertheim, E., Paxton, S., & Blaney, S. (2009). Body image in girls. In L. Smolak & J. K. Thompson (Eds.), *Body image, eating disorders, and obesity in youth: Assessment, prevention, and treatment* (2nd ed.) (pp. 47-76). Washington, D.C.: American Psychological Association.