WHEN DIETING GOES TOO FAR

By Katherine Beals, PhD, RD, FACSM

BEING AS LEAN AS THESE TWO PHYSIQUE COMPETITORS MAY OR MAY NOT BE AN INDICATION OF AN EATING DISORDER.

Disordered Eating: No laughing matter for your health or performance

"She's so thin, she must be anorexic."

"He never eats anything and exercises like a maniac; he must have an eating disorder."

"She eats everything in sight but never gains a pound; she must be bulimic."

Offhand comments like these are frequently tossed around the gym, the locker room, and the playing field. Yet few people voicing these words understand what an eating disorder *really* is and fewer still understand how truly devastating it can be to an athlete's health and performance. This article is intended not only to increase your understanding of eating disorders but to provide you with the skills needed to identify and perhaps even prevent these disorders from taking over your life or the life of someone close to you. And if you think that because you're a guy, eating disorders aren't a concern to you—think again.

EATING DISORDER OR DISORDERED EATING?

The clinical eating disorders—anorexia nervosa, bulimia nervosa, and binge eating disorder—are characterized by *severe* disturbances in eating behavior and body image. This type of clinical eating disorder is a serious psychiatric condition that goes beyond body weight dissatisfaction and unhealthy weight control behaviors. Athletes suffering from clinical eating disorders often display severe feelings of insecurity and worthlessness, have trouble identifying and displaying emotions, and experience difficulty in forming close relationships with others.[1] If only some of the symptoms are displayed, and there's an absence of psychological disturbances, the athlete's suffering from what's termed a subclinical eating disorder or, more generally, disordered eating.[6]

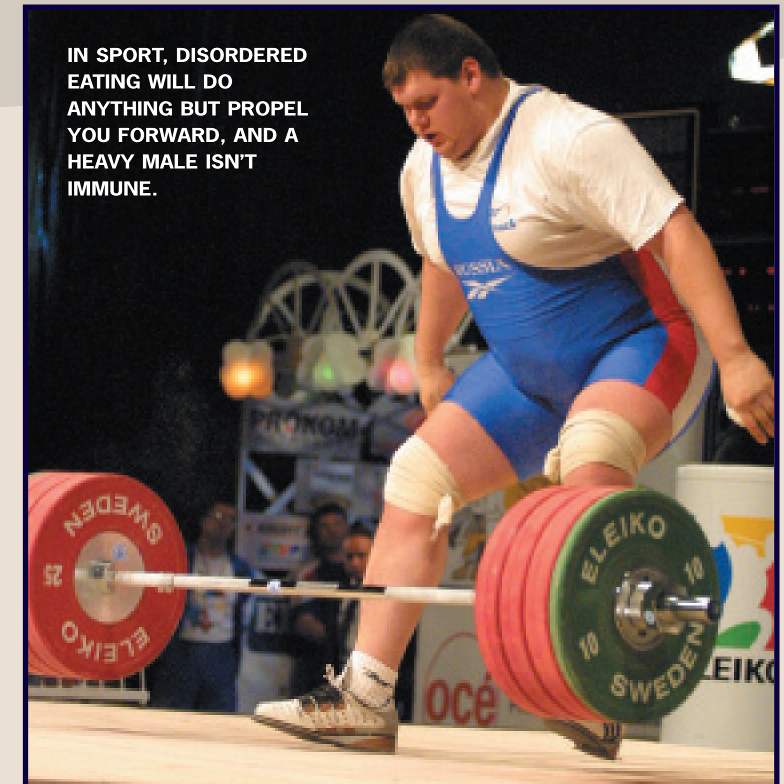
Take, for example, Sheila, a collegiate powerlifter. Sheila eats a very low-calorie (~1000 kcal/d), high-protein, low-carbohydrate, and low-fat diet. Occasionally her willpower breaks down and she binges on forbidden foods like cake or ice cream. To compensate for the binge, she'll spend an extra two hours on the elliptical trainer in an attempt to burn off what she's eaten. While she's openly dissatisfied with her body weight (although her body fat is on the low end of normal), she doesn't display any significant psychological disturbances; she's most likely suffering from a subclinical eating disorder. It's only a matter of time before Sheila's disordered eating behaviors negatively impact her performance as well as her health.

TO THE SOURCE

Very few people—athletes included—are happy with their bodies and many people have been or will go on a diet. While not everyone who obsesses over body weight or goes on a diet will develop an eating disorder, *all* athletes diagnosed with eating disorders report a history of dieting and body weight obsession. So what causes some to take these behaviors to the extreme and develop an eating disorder?

Most eating disorder specialists believe that the answer is largely personality. Perfectionist, goal-oriented, high-achieving, poor self-esteem—these terms are all characteristic of those with eating disorders. The traits that personify the successful athlete—highly competitive, self-disciplined, perfectionist—may render athletes particularly prone to developing eating disorders.[7] These traits combined with pressure from an overzealous coach, parent, trainer, and/or peers who stress the need to lose weight in order to win and who place winning above health can put an athlete at risk.

Also, research has shown that certain inherent pressures in the sport setting may trigger the development of an eating disorder in psychologically vulnerable athletes. Dr. Jorunn Sundgot-Borgen, a leading researcher in the area of disordered eating in athletes, examined the etiology (cause of disease) of disordered eating behaviors in 522 elite Norwegian female athletes and found that starting sport-specific training early and dieting at an early age were frequently associated with the development of eating disorders.[9] In addition, prolonged periods of dieting, frequent weight fluctuations, sudden increases in training volume, and/or traumatic life



IN SPORT, DISORDERED EATING WILL DO ANYTHING BUT PROPEL YOU FORWARD, AND A HEAVY MALE ISN'T IMMUNE.

DIAGNOSING EATING DISORDERS

For yourself, and for your friends, here is a list of criteria to help you recognize what type of eating disorder may be involved.[1] Of course, for a complete diagnosis, you need to seek out professional help.

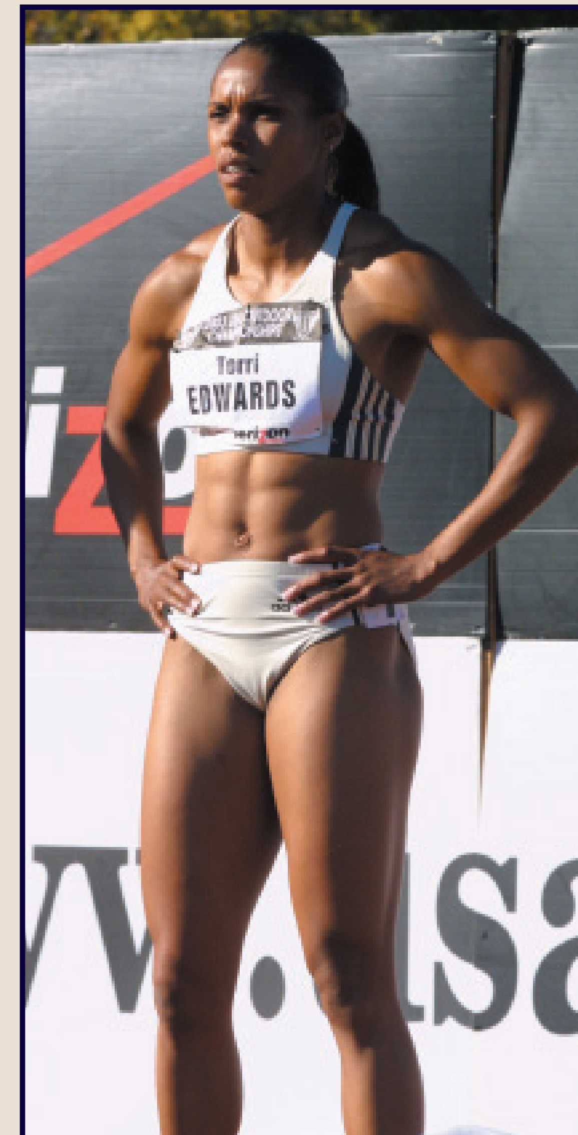
ANOREXIA NERVOSA
- obsession with the desire to be thinner
- intense fear of gaining weight
- a significant loss of body weight and/or extremely low body weight (85% of normal weight for height)
- severe body dissatisfaction and body image distortion
- amenorrhea (absence of three or more consecutive menstrual periods)

BULIMIA NERVOSA
- episodes of binge eating followed by purging (via laxatives, diuretics, enemas, self-induced vomiting, and/or excessive exercise)
- occurs at least twice a week for three months
- a sense of lack of control during the bingeing and/or purging episodes
- severe body image dissatisfaction and undue influence of body image on self-evaluation

BINGE EATING DISORDER
- lack of control over eating during the binge episode
- marked distress regarding binge eating
- occurs about two days a week for six months

POTENTIAL HEALTH AND PERFORMANCE CONSEQUENCES OF DISORDERED EATING[4]

Fasting or starvation	Loss of lean body mass Decreased metabolic rate Reduction in bone mineral density Risk of nutrient deficiencies Glycogen depletion resulting in poor performance
Diet pills	Suppression of appetite and possible increase in metabolic rate (if pills contain ephedrine or caffeine) Rapid heart rate Anxiety Inability to concentrate Nervousness, inability to sleep Dehydration Weight lost is quickly regained once use is discontinued
Diuretics	Weight loss from water Weight lost is quickly regained once use is discontinued Possible heart arrhythmia due to electrolyte imbalances
Laxatives or enemas	Weight loss from water Weight lost is quickly regained once use is discontinued Dehydration and electrolyte imbalances Constipation, colon dysfunction Steatorrhea (excessive fat in feces) Addiction potential Resistance potential requiring larger and larger doses
Self-induced vomiting	Largely ineffective for weight/fat loss Dehydration and electrolyte imbalances Gastrointestinal problems Caries and erosion of tooth enamel Finger calluses or abrasions
Fat-free diets	Lack essential nutrients, e.g., fat-soluble vitamins and fatty acids Total energy intake must still be reduced to produce weight loss Many fat-free foods are highly processed, with high sugar content and few micronutrients Can promote binge eating
Saunas	Water loss Weight lost is quickly regained once fluids are replaced Dehydration and electrolyte imbalances Heart arrhythmia
Excessive exercise	Increased risk of staleness Chronic fatigue Illness Overuse injuries Menstrual dysfunction (women)



EVEN IF SHE'S A TOP PERFORMER, NO ATHLETE IN ANY SPORT IS IMMUNE TO DISORDERED EATING.

events such as an injury or a change of coach tended to trigger the development of eating disorders.

REAL MEN EATING POORLY

Even though prevalence estimates indicate that women outnumber men (approximately 10 to 1) when it comes to eating disorders, men can and do suffer from eating disorders.[8] In fact, because of the social stigma associated with eating disorders in men (i.e., the common idea that eating disorders are a woman's problem), current estimates are probably low.

Eating disorders in male and female athletes are thought to be more similar than dissimilar. Nonetheless, there are etiological and behavioral differences between the genders that bear mention. For example, males who develop eating disorders are more likely to have actually been overweight or even obese (particularly those who develop bulimia nervosa), as opposed to females who simply *felt* overweight or obese. In addition, while both males and females with disordered eating suffer a similar degree of body dissatisfaction, females with eating disorders universally want to lose weight, while males tend to be evenly split between those wanting to lose weight and those desiring weight gain. In

DISORDERED EATING WARNING SIGNS[4]

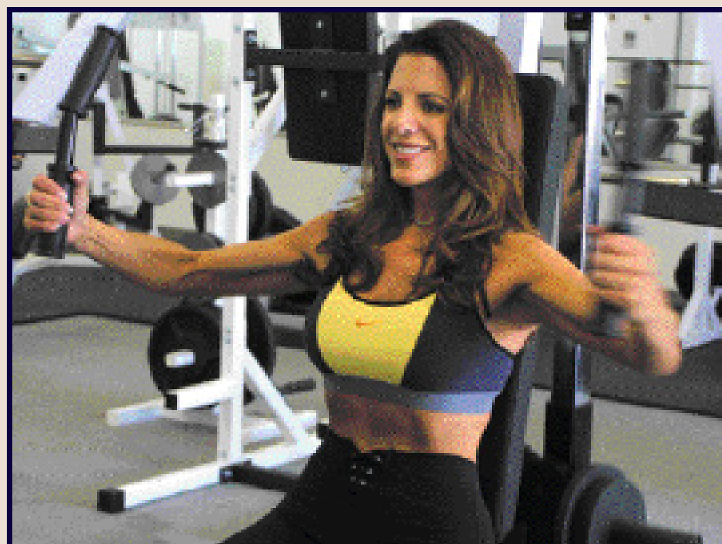
- Excessive criticism of one's body weight or shape
- Preoccupation with food, calories, or weight
- Compulsive, excessive exercise
- Mood swings, irritability
- Depression, social withdrawal
- Secretly eating or stealing food
- Avoiding food-related social activities
- Excessive use of laxatives, diuretics, diet pills
- Consumption of large amounts of food inconsistent with athlete's weight
- Excessive fear of being overweight or fat that doesn't diminish with weight loss
- Chronic fatigue
- Noticeable weight loss, gain, or fluctuations
- Frequent gastrointestinal problems or complaints (e.g., excessive gas, abdominal bloating, constipation, ulcers)
- Lanugo (fine hair on the face and body)
- Callused fingers
- Frequent musculoskeletal injuries (particularly stress fractures)
- Delayed or prolonged healing of wounds or injuries
- Frequent or prolonged illnesses
- Dry skin and hair
- Brittle nails
- Allopecia (hair loss)
- In women, irregular or absent menstrual cycles

CONFRONT THE ATHLETE

When an eating disorder is suspected, what to do? The Association of Anorexia Nervosa and Associated Disorders offers **CONFRONT**:[3]

- Express **C**oncern for the athlete by saying that you care about his or her mental, physical, and nutritional needs.
- Get **O**rganized; plan where to confront the individual and determine a convenient time.
- Having support groups and eating disorder resources available will be an immediate **N**eed after the confrontation.
- **F**ace the athlete empathetically but directly.
- Be sure to **R**espond to the athlete by listening to his or her concerns.
- **O**ffer help and suggestions for how the athlete should proceed and be willing to support the athlete in the recovery process.
- **N**egotiate another time to talk with the athlete once he or she has sought professional help.
- Recognize that recovery is **T**ime-intensive and that the athlete faces many challenges in the treatment process.

addition, the motivation behind the weight control behaviors is distinct. For men, weight control is solely about improving performance, whereas for women it's more often about enhancing appearance.[2] It has also been reported that male athletes are more likely than their female counterparts to engage in "defensive dieting"—that is, dieting to prevent weight gain during an injury or illness. Finally, male athletes are more apt to use excessive exercise as a means of weight control, whereas females more frequently use severe energy restriction, vomiting, and laxatives. While excessive exercise may be viewed by some as less problematic than other weight loss methods (e.g., vomiting), an increase in injury and overtraining potential can severely impact performance.



A WELL-BALANCED DIET WITH SUFFICIENT CALORIES IS GINA LOMBARDI'S SECRET TO BEING FIT AND HEALTHY.

TO PREVENT AND TREAT

No athlete emerges from an eating disorder unscathed: the physical and emotional effects can be severe and, in some cases, irreversible. Thus, the best way to protect an athlete from an eating disorder is to try to prevent it. Prevention strategies should focus on dispelling the myths and misconceptions surrounding nutrition, body weight and composition, weight loss, and the impact of these factors on athletic performance.[4] Ensuring that both athletes and athletic staff understand the limitations of body build (and the lack of a clear association with performance) can help prevent an obsession with body weight and body composition and reduce anxiety over "measuring up." Equally important is providing accurate and appropriate nutritional information and dietary guidance to promote optimal health and athletic performance. Coaches can be particularly instrumental in prevention strategies by actively promoting and modeling healthy eating behaviors and referring athletes to a qualified nutritional professional for weight and/or diet issues.

Research indicates that the longer an eating disorder persists without treatment, the more severe the health and performance consequences.[4] Thus, early identification and intervention are critical. While a variety of eating disorder questionnaires and screening instruments are available, direct observation is still considered the best, most reliable method. Knowing *what* to look for is therefore the key to early identification.

EATING DISORDERS RESOURCES

BOOKS

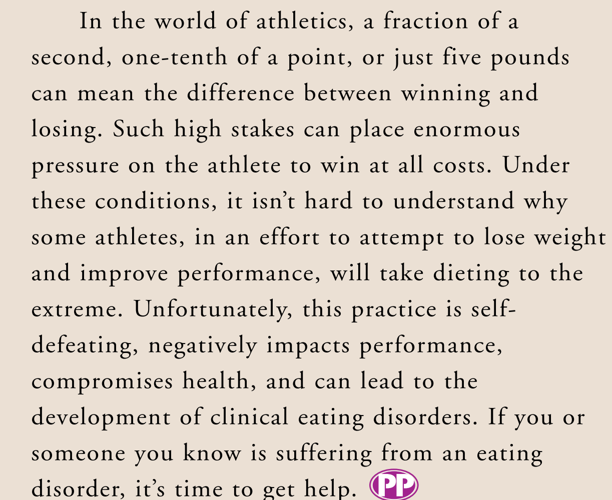
- Beals, K.A. *Disordered Eating Among Athletes: A Comprehensive Guide for Health Professionals.* Champaign, IL: Human Kinetics, 2004.
- Thompson, R.A., and R.T. Sherman. *Helping Athletes with Eating Disorders.* Champaign, IL: Human Kinetics, 1993.

WEBSITES

- Anorexia Nervosa and Related Eating Disorders, Inc. www.anred.com
- Association of Anorexia Nervosa and Associated Disorders. www.anad.org
- Eating Disorder Referral and Information Center. www.edreferral.com
- Something Fishy. www.something-fishy.org

Once you have identified someone with an eating disorder, you need to convince him or her to seek treatment, which is perhaps the most difficult part. You should not confront the athlete in an accusing or reproachful manner. Rather, approach the athlete with sincerity, respect, caring, and concern.[3] Using "I" statements (e.g., "*I* have noticed that your performance is declining and *I'm* concerned about you") is recommended over "you" statements (e.g., "*You* aren't eating enough and *you* look sick all the time").

TO EXCELLENCE



In the world of athletics, a fraction of a second, one-tenth of a point, or just five pounds can mean the difference between winning and losing. Such high stakes can place enormous pressure on the athlete to win at all costs. Under these conditions, it isn't hard to understand why some athletes, in an effort to attempt to lose weight and improve performance, will take dieting to the extreme. Unfortunately, this practice is self-defeating, negatively impacts performance, compromises health, and can lead to the development of clinical eating disorders. If you or someone you know is suffering from an eating disorder, it's time to get help. PP

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2. Andersen, A.E. Eating disorders in male athletes: A special case? In *Eating, Body Weight and Performance in Athletes: Disorders of Modern Society*, ed. K.D. Brownell, J. Rodin, and J.H. Wilmore, 172-188. Philadelphia: Lea and Febiger, 1992.
3. Association of Anorexia Nervosa and Associated Disorders. www.anad.org.
4. Beals, K.A. *Disordered Eating Among Athletes: A Comprehensive Guide for Health Professionals.* Champaign, IL: Human Kinetics, 2004.
5. Beals K. Eating disorder and menstrual dysfunction screening and treatment programs employed by NCAA division I schools. *Physician and Sports Medicine* 31:33-38, 2003.
6. Beals, K.A., and M.M. Manore. Behavioral, psychological and physical characteristics of female athletes with subclinical eating disorders. *International Journal of Sport Nutrition and Exercise Metabolism* 10:128-143, 2000.
7. Garner, D.M., and L.W. Rosen. Eating disorders among athletes: Research and recommendations. *Journal of Applied Sport Science Research* 5:100-107, 1991.
8. Pope, H.G., Jr., K.A. Phillips, and R. Olivardia. *The Adonis Complex: The Secret Crisis of Male Body Obsession.* New York: Free Press, 2000.
9. Sundgot-Borgen, J. Prevalence of eating disorders in elite female athletes. *International Journal of Sport Nutrition* 3:29-40, 1993.

EATING DISORDER SCREENING, EDUCATION, AND TREATMENT FOR COLLEGES

Identification and early intervention is the key to minimizing the damaging effects of eating disorders. In 1999, Katherine Beals, PhD, RD, FACSM, surveyed 170 NCAA division I schools to determine the nature, scope, and perceived effectiveness of their eating disorder (ED) and menstrual dysfunction (MD) screening, education, and treatment programs.[5]

The results indicated that while 79% of schools reported screening for MD, only 24% used a comprehensive menstrual history questionnaire. An MD treatment protocol was used by 33% of schools, and 7% reported restricting those with MD from athletic participation. Screening for ED was reported by 60% of schools; however, less than 5% used a structured interview and/or validated ED questionnaire. An ED treatment protocol was employed by 40% of schools, with the remainder treating ED on a case-by-case basis.

These results demonstrate a pressing need for more standardized ED and MD screening, prevention, and treatment programs among NCAA division I schools. In addition, greater emphasis needs to be placed on mandatory ED and MD education for all athletes and athletic personnel.