

The best approach to losing weight and keeping it off is to combine exercise with a moderate diet. A moderate increase in activity, coupled with a moderate decrease in caloric intake, will cause the body to burn fat reserves and thereby lose weight. A weight loss of one to two pounds each week is considered healthy. Weight loss of more than two pounds a week may be partially the result of dehydration.

It is always important to check with your family doctor before beginning any weight loss or gain program.

DISORDERED EATING

Disordered eating patterns are extreme expressions of food and weight issues experienced by many individuals, particularly girls and women. They include anorexia nervosa, bulimia nervosa, and binge eating. These disorders are very dangerous behaviors that result in health problems.

Participants in sports that emphasize appearance and a lean body are at higher risk for developing disordered eating behavior. Many women athletes who engage in harmful methods of weight control suffer from amenorrhea and bone loss. *Amenorrhea* is the abnormal suppression or absence of menstruation.

Out of all the athletes with disordered eating behavior, 10% are male. One particular concern with male disordered eating arises with the sport of wrestling, which has several different weight classifications. These classifications require the athlete to make the weight or forfeit the match (Figure 8-16). This encourages extreme weight-loss measures aimed at losing a few pounds as quickly as possible. These athletes often wear rubber suits while exercising, chew gum and spit excess saliva into a cup, fast, and drink no fluids. These methods of losing weight are not only unhealthy, but also sometimes deadly. It is imperative that coaches and parents monitor these athletes carefully so that they do not “make weight” at the risk of their health.

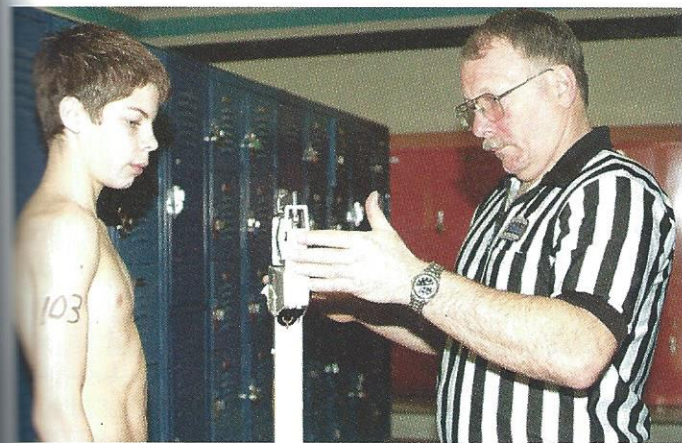


Figure 8-16 Athletes, like this wrestler, who consistently try to lose weight through starvation and dehydration, run the risk of serious health problems. (Courtesy of Mark Dickerson, Action Sports Photography)

female athlete triad

A collection of symptoms seen in female athletes, consisting of disordered eating, amenorrhea, and osteoporosis (bone loss).

The Female Athlete Triad

In 1992 the American College of Sports Medicine named the collection of symptoms seen in female athletes the “**female athlete triad**.” The triad consists of disordered eating, amenorrhea, and osteoporosis (bone loss). The triad is especially prevalent in sports that emphasize the aesthetic of leanness, such as gymnastics, figure skating, diving, and dance (Figure 8-17).

It is also seen in sports such as swimming and running, where leanness is thought to yield a competitive edge. Because the triad may result in irreversible bone loss and death, early detection is important. Some of the signs and symptoms include eating alone, trips to the bathroom during or after meals, use of laxatives, fatigue, anemia, depression, and eroded tooth enamel from frequent vomiting.

Treatment of the female athlete triad involves education, nutrition, determining contributing factors, and care from a medical specialist trained in disordered eating. The rate of eating disorders among nonathletes is believed to be between 3% and 8% and among female athletes anywhere from 15% to 62%.

Girls and women often experiment with different ways to lose weight. Some of these are:

- diuretics
- laxatives
- self-induced vomiting
- diet pills
- serious overexercising

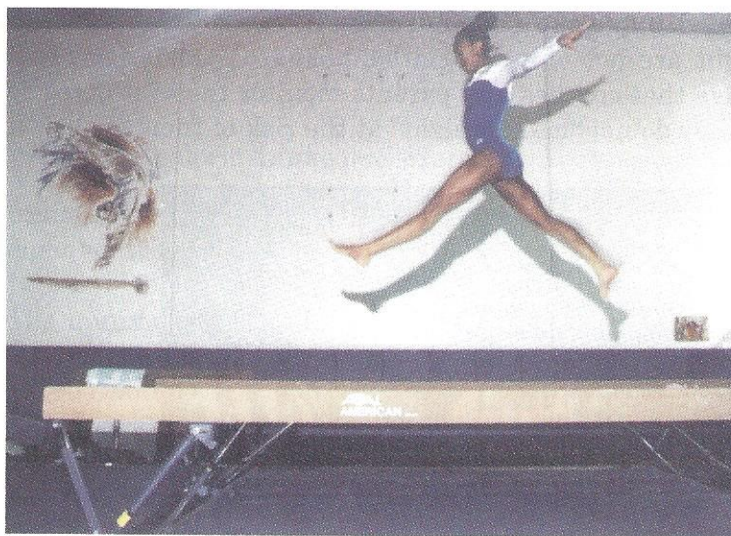


Figure 8-17 The female athlete triad is especially prevalent in sports that emphasize the aesthetic of leanness, such as gymnastics, figure skating, diving, and dance.

All of these methods can have serious side effects. Understanding the female athlete triad, and the importance of proper nutrition and a positive body image, is imperative for coaches, athletic trainers, parents, and athletes. The following suggestions for coaches and trainers can help:

- Avoid weighing athletes and obtaining body composition data
- Observe meals to check for disordered eating patterns.
- Encourage a snack period midway through practice to replenish energy.
- Provide mandatory seminars by a qualified nutritionist on the importance of a balanced diet for athletic performance.

Anorexia Nervosa

Anorexia nervosa is a psychophysiological disorder, usually occurring in young women, that is characterized by an abnormal fear of becoming obese, a distorted self-image, a persistent unwillingness to eat, and severe weight loss. It is often accompanied by self-induced vomiting, excessive exercise, malnutrition, amenorrhea, and other physiological changes. As many as 15% to 21% of individuals diagnosed with anorexia nervosa will die from this disorder. Signs and symptoms include substantial weight loss (at least 15% of a person's normal body weight), loss of appetite, loss of menstruation, fatigue and dizziness, constipation, and abdominal pains. The person may feel cold to the touch even in warm weather. Physical dangers associated with anorexia nervosa include starvation (as the body begins to use its own tissue for energy), dehydration, muscle and cartilage deterioration, osteoporosis, irregular or abnormally slow heart rate, and heart failure.

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Bulimia

Bulimia is an eating disorder, common especially among young women of normal or nearly normal weight, characterized by episodic binge eating and followed by feelings of guilt, depression, and self-condemnation. It is often associated with measures taken to prevent weight gain, such as self-induced vomiting, the use of laxatives, dieting, or fasting. Signs and symptoms include fluctuations in weight, often going from one extreme to the other (underweight to overweight), dental cavities caused by stomach acid regurgitation during vomiting, dehydration, fatigue and dizziness, constipation and abdominal pains, swelling of the salivary glands (leading to "chipmunk cheek" enlarged cheeks or jowls), and irregular or absent menstruation. Physical dangers associated with bulimia include stomach ulceration; bowel damage; inflammation and occasionally tearing of the esophagus; laxative addiction; tingling

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KEY CONCEPT

The underlying reasons for disordered eating are distorted self-image, guilt, depression, and overemphasis on leanness and physical appearance.

in the hands and feet; and electrolyte imbalances, which can lead to heart failure.

SPECIAL DIETS

Many special diets on the market today promise significant weight loss, while claiming to be safe and healthy. Many of these diets offer incredible weight loss without calorie limitation or exercise. Many require taking a few pills each day or consuming a special diet powder mixed with water or fruit juice. Some require a diet high in protein and low in carbohydrates; others eating cabbage soup, using hypnosis, wraps . . . the list goes on and on.

Before embarking on any special diet, the athlete should talk with the family doctor, nutritionist, certified athletic trainer, or health professional. Good health is too important to risk on potentially dangerous diets.

Pregame Meal

Before competition—sometimes several days prior—many athletes begin a special diet that limits protein intake and concentrates on carbohydrates. Athletes believe that a pregame meal will give them the energy they need for the competition. However, the energy for the game actually comes from muscle glycogen stores that are built up by consuming high-carbohydrate meals every day, not just at the pregame meal. The foods eaten before the game helps supplement muscle glycogen stores. The pregame meal also helps to prevent a low blood sugar level, with its symptoms of light-headedness, fatigue, and low concentration; all of these can interfere with performance.

The pregame meal should be eaten approximately three to four hours before the game. Food should be high in carbohydrates and fluids. Grain products, vegetables, and fruit are the best choices for a pregame meal, because they are digested quickly and are readily available for fuel. Protein intake should be in moderation, as protein takes longer to digest than carbohydrates. High-fat foods stay in the stomach the longest, and may feel heavy and uncomfortable for the athlete. Restrict sugary foods. Sweets can cause rapid swings in blood sugar levels and result in low blood sugar and less energy. Avoid foods and drinks that contain caffeine. Caffeine stimulates the body to increase urine output, which can contribute to dehydration problems, and a full bladder can be very uncomfortable. The accompanying display is an example of a pregame meal.