Eating Related Problems Among Athletes

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Why are Athletes at Risk for Eating Disorders?

Specific pressures within the sport environment may cause or exacerbate problematic eating. For example, athletes may experience pressure to lose weight from coaches or teammates, have to play under sport specific weight restrictions, have performance outcomes based on judging criteria that reward a certain body type (e.g., gymnastics), and be pressured to conform to athletic body stereotypes, such as expecting runners to be tall and lithe. Athletic uniforms, practices, and performance environments, and peer pressure also may increase athletes’ body dissatisfaction. Further, a strongly held belief in sports is that reducing body fat will automatically and substantially improve performance. This belief is not only incorrect, it can lead to unhealthy eating behaviors and body attitudes, such as restrictive dieting and excessive exercise, that can further impede performance and cause psychological distress.

What Can Coaches Do to Help Prevent and Treat Disordered Eating?

Coaches, athletic trainers, and sports medicine personnel can help create a positive and healthy environment for athletes by implementing the following suggestions:

- Instead of emphasizing weight, focus on health and fitness. Emphasize eating to maximize performance, not reaching a certain weight.
- Avoid linking weight loss to enhanced performance or appearance.
- Do not weigh athletes. Respect athletes’ privacy and individual differences in weight and body shape. If there is a medical reason to weigh athletes, it should be done in private by sports medicine personnel.
- Coaches should never be involved in weighing athletes.
- Set a positive example for athletes by demonstrating healthy eating behaviors, moderate physical activity, and a positive body image.
- If eating related problems are suspected, talk directly with the athlete. Emphasize your concern for his or her well-being (don’t focus on weight) and assist athletes in seeking treatment from an eating disorder specialist (e.g., psychologist, counselor). Also, be supportive of treatment, even if that means athletes will miss practices on occasion.
- To find out more information on eating disorders and athletes, we recommend the following books:

What are Eating Disorders?

Clinical eating disorders include anorexia nervosa and bulimia nervosa. Anorexia nervosa involves not maintaining normal body weight, an intense fear of gaining weight, body image disturbance, and disruption of menstrual cycles. Bulimia nervosa involves binge eating, inappropriate compensatory behaviors (e.g., vomiting, excessive exercise), and shape and weight based self-evaluation. Subclinical eating disorders generally involve similar symptoms, however these symptoms are experienced to a lesser degree and do not meet clinical diagnostic standards. Such subclinical disorders may include binge eating without purging, excessive exercising, or rigid dieting.

In the United States, only about 1% of the general population has a clinical eating disorder. Of people with clinical eating disorders, approximately 90% are female and approximately 10% are male. The prevalence of clinical eating disorders among athletes is slightly higher than in the general population. Similarly, higher rates of subclinical disorders have been found among athletes than non-athletes, particularly among athletes in sports like swimming and cross-country that focus on appearance or weight. Understanding that athletes do experience disordered eating problems at relatively high levels is a key in prevention and detection.

How Do You Recognize Disordered Eating?

One of the challenges in detecting disordered eating in the sport/exercise environment is that the characteristics of “good athletes” often parallel those associated with the disorders themselves (Thompson & Sherman, 2000). For example, is the athlete who trains rigorously, plays through pain or injury, is selflessly committed to team/coach, loses weight, and accepts nothing less than perfection a “good” athlete or an eating disorder client? To avoid being complacent and missing a potentially life threatening problem, we recommend all athletic personnel be aware of certain behaviors that suggest the presence of an eating problem. These behaviors include: excessive concern about body size, shape or weight, atypical fluctuations in weight, changes in typical eating behaviors, excessive exercise, depressed mood, use of diet pills or laxatives, going to the bathroom frequently after eating, fear of gaining weight or getting fat, bloodshot eyes, smell of vomit, and nicks on fingers or knuckles.

Individuals with eating disorders also may be depressed, have low self-esteem, be dissatisfied with their bodies, be perfectionistic, experience anxiety, and feel a lack of control in their lives.

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Athletes today realize that good coaching, proper strength and conditioning methods, and optimal psychological preparation, are among the many variables that can contribute to athletic success. Another essential component that unfortunately may be overlooked is good nutrition.

The main ingredient in proper nutrition is balance. It is important to eat from the food groups that are depicted in the Food Guide Pyramid. To help athletes familiarize themselves with the Pyramid, coaches may want to post it in the gym or training room. The Pyramid outlines daily recommendations for food servings from six food groups: 6-11 servings of bread, cereal, rice, and pasta; 3-5 servings of vegetables; 2-4 servings of fruit; 2-3 servings of milk, yogurt, and cheese; 2-3 servings of meat, poultry, fish, dry beans, eggs, and nuts; and the sparing use of fats, oils, and sweets. By following the Pyramid and adding sufficient daily fluid intake, an athlete can be assured of a diet that includes the appropriate balance of macronutrients that provide energy (carbohydrates, protein, and fats), minerals, vitamins, and last but not least, water.

Carbohydrates

Carbohydrates are an essential part of an athlete’s diet because they provide the best fuel, in the form of glycogen, for prolonged, high intensity exercise. One limitation, though, is our body’s ability to store large amounts of glycogen. In order maintain glycogen levels that are necessary for strenuous exercise and high-level performance, athletes daily consume more carbohydrates than nonathletes. Approximately 60% of daily caloric intake should be derived from carbohydrates and most of these should be of the complex variety (as opposed to simple sugars). Pre-exercise carbohydrate feedings can help maximize glycogen stores in the body. During prolonged exercise, carbohydrates can be consumed to spare glycogen stores and extend exercise capacity. To optimize the replenishment of glycogen, carbohydrate feedings should occur within two hours post-exercise. This approach replenishes carbohydrate stores, speeds recovery and readies the body for the next training session or competition.

Proteins

There has been a misconception in the sport community that athletes need to eat substantially larger amounts of protein than nonathletes. To promote growth and repair of muscle tissue following workouts and competitions, some athletes may consume more protein than nonathletes, but the recommended amount (0.55-0.77 g/kg body weight) is in line with the average North American diet. In reality, for growth and muscle tissue repair to occur, the athlete will need to consume additional calories that have been adequate levels of protein and carbohydrates.

Fats

Fats have also been a misunderstood nutrient but for the opposite reason. Many athletes don’t realize that fat is a very important nutrient for good health and proper physiological operation. Although the typical recommendation is to keep it to a minimum, dietary fat also provides satiety and fullness from a meal, and is a necessary fuel source for endurance activities. Thus, athletes should not completely eliminate this essential nutrient from their diets.

Fluids

Fluid is a class of nutrients that includes water and sport beverages, such as Gatorade. Among their many crucial roles, a primary role of fluids is thermoregulation. Inadequate body fluid levels compromise the body’s ability to prevent core temperature from rising to dangerous levels, which generally occur because of a reduced ability to sweat and a decline in blood volume. In such situations, the dehydrated athlete needs to stop exercising or risk potentially severe health consequences. Athletes should consume fluids without waiting for thirst, which indicates a potentially dangerous body water loss of at least 1%. Athletes should begin hydrating 4-6 hours before exercise.

Generally, it is best to drink water during the 15-60 minutes prior to beginning exercise, though low-calorie drinks are also fine if the athlete doesn’t like water. Water, sports drinks, and diluted juice, are fine within 15 minutes pre-exercise. During exercise, the athlete should drink at least half a cup of cold fluid every 10-15 minutes.

Conclusion

The Food Guide Pyramid can be used to identify examples of key nutrients that are derived from each group. Consuming lean meats, poultry, fish, dry beans, eggs, and nuts, is an excellent way to get protein, iron, and niacin (vitamin B3). Dairy products, such as low-fat versions of milk, cheese, and yogurt, are a tremendous source of calcium, riboflavin (vitamin), and protein. The grain and cereal group, which includes great stack foods such as crackers and pretzels, is a primary source of carbohydrates, fiber from whole-grain foods, and B vitamins. Starchy vegetables, such as potatoes and corn, can serve a similar role in the diet. Fruits and vegetables are especially good sources of fiber and important vitamins, including antioxidants. Healthy fats, such as monounsaturated oils coming from olives, nuts, and seeds, can provide essential fatty acids and vitamin E.

For health and performance reasons, athletes need to be fueled through a diet that is balanced and nutritious. In addition, they must maintain adequate hydration before, during and after bouts of exercise. Although sometimes difficult to achieve, maintaining a proper diet and adequate hydration can have very real effects in terms of performance outcomes.

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