

Body Image and the *Female Athlete*

Identifying challenges in nutrition and body composition

BY LAANNA CARRASCO, MA



A leaner athlete is a better athlete.” Do you agree with this statement? It’s a common belief that is certainly true from a biomechanical perspective: The less mass an athlete has to move, the less force is required to move it at a given speed, meaning that excessive fat makes athletes slower. However, we have to keep in mind that athletic performance

Still, body image issues and disordered eating remain prevalent in women’s sports. The effects range from mild anxiety about one’s body to a multifaceted disorder called the *female athlete triad*, which is composed of low energy intake and/or very low body fat, lack of menstrual periods, and bone loss. The triad affects athletes in endurance and judged sports such as gymnastics more

That experience showed me that if I worked hard enough and ate vegetables and fruit instead of bread and pasta, I could shape my body how I wanted. Even so, I never ended up excelling as a college basketball player, ultimately quitting the team and focusing on academics.

How much did my focus on staying thin affect my playing performance?

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is a combination of strength, power, endurance, energy stores, skill, mental abilities and countless other interrelated factors. That’s why it’s counterproductive to place too much emphasis on body composition, especially for female athletes.

Female athletes who believe they must be thin to win may fall into the trap of pursuing diets so severe that they compromise their performance and health. Studies show female athletes are six times more likely to have poor body image than non-athletes; in fact, 25-75 percent of female college athletes have disordered eating patterns and dissatisfaction with their bodies, traits that are often manifested in a drive to lose weight.

On the positive side, concern about the dangers of thinness as an athletic ideal has led to the increasing awareness among coaches and within college athletic programs that nutritionists are just as important as strength and conditioning coaches for female athletes.

Team BFS weightlifters Brittanie Masticola (at left) and Nikki Gnozzio (at right) are two confident young women. Gnozzio is a Division 1 strength coach at Providence College in Rhode Island, and Masticola is the recipient of the 2012 BFS Weightlifting Scholarship.

than strength and power athletes, but disordered eating and body image issues can affect all types of female athletes.

In fact, characteristics that allow female athletes to excel make them much more susceptible than non-athletes to poor body image and disordered eating. The ability to push oneself to outperform opponents and overcome physical pain is an admired trait that allows female athletes to succeed. Unfortunately, the very trait that helps them excel also predisposes them to take comments about their weight too far. Even indirect suggestions relating to body composition and performance, or comparisons to other athletes, can profoundly influence a female athlete’s psyche.

I experienced this during the summer before my freshman year in college, when I was set to play on the women’s basketball team. The assistant basketball coach told me that our whole team needed to “get lean.” I took the suggestion to heart and started running and lifting so that I arrived on campus quite lean and with much better conditioning than any other player on the team. I received lots of positive feedback about my physique and became very preoccupied with staying lean throughout the season and thereafter.

It’s impossible to tell in retrospect, but this example shows the power of a coach’s careless words. As coaches, parents of athletes, and teammates, we need to focus on helping female athletes develop psychological, physical and dietary behaviors for lifelong health, not just performance.

Katherine A. Beals, a registered dietitian who has spent her career working with female athletes and researching the female athlete triad, uses an individualized approach and focuses on healthy eating when working with athletes. “There’s no evidence that weight is going to determine success as an athlete regardless of the sport – distance runner, basketball or volleyball player,” Beals says, adding that if an athlete is eating correctly (a balanced diet consisting of whole foods) and trains adequately, her body weight will “fall” where it needs to be for optimal performance.

Beals rarely tests body fat or weight in working with female athletes because neither correlates with peak performance, and an overemphasis on these measures can lead to body image issues and disordered eating. “It doesn’t matter what the measure is, an athlete will use it to evaluate themselves and usually the evaluation is negative,” Beals says.

She does sometimes calculate resting metabolic rate – the amount of calories a person burns at rest without the addition of exercise – so that an athlete can recognize the minimal energy intake that they must achieve. Beals has found that female athletes often lack a realistic view of their energy needs, so this can be a tool to start with.

Body mass index (BMI) is another measurement that is widely used to assess body composition; however, it is not useful for athletes. It does not correlate with body fat and has been shown

to be an inaccurate predictor among more-muscular populations.

For example, in one University of Miami study of female college athletes of different races, body fat percentage was found to be very different among the racial groups, but the average BMI was the same for all three groups. This study also found that, regardless of race or body fat percentage, the athletes with higher BMIs were preoccupied with their weights, wanted to lose weight, and exercised in order to do so.

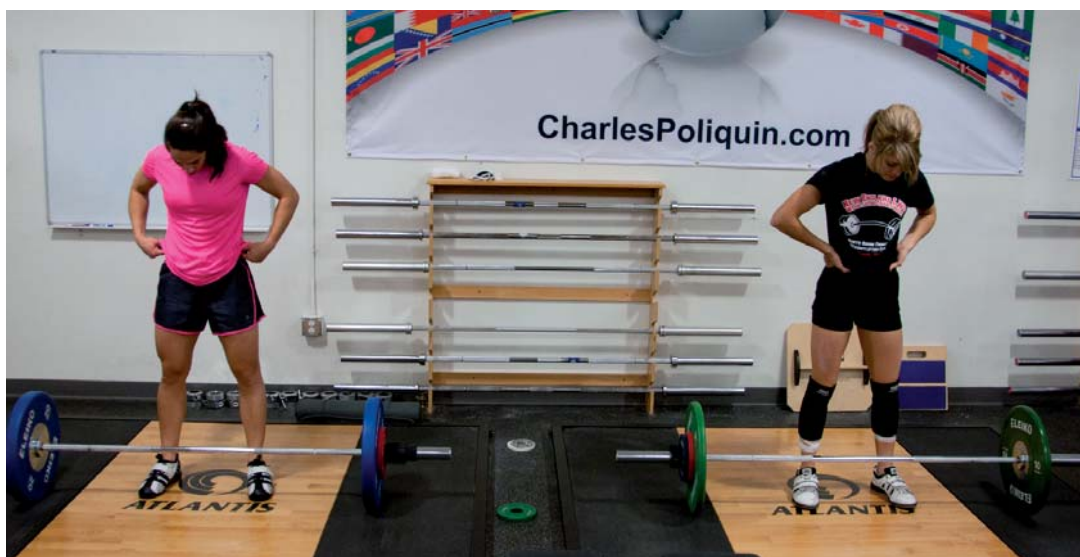
With obesity rates in the general

population increasing, what can athletes do if they are dissatisfied with their bodies and are overweight? According to a publication put out by the NCAA that focuses on managing the female athlete triad, if an athlete is in fact overweight due to overeating, then the athlete needs to consult a mental health practitioner to determine and eliminate the source of the non-hunger eating.

The problem with relying on this particular approach is that an athlete may be secretive about admitting or reporting disordered eating, excessive



Resistance is an essential tool for helping female athletes achieve the best body composition for their sports. Gnozzio and Masticola are training to compete in the 2012 Senior National Weightlifting Championships.



exercise or concerns with body image. Self-reported surveys overwhelmingly underestimate body image concerns, rates of restrictive eating, and female athletes' risk of developing the female athlete triad.

Even medical screenings may fail to reveal body image problems. For instance, a study from Trinity College that assessed group intervention models to improve body image issues in Division III female athletes reported that seven athletes came forward to the head athletic trainer at the end of the intervention because they were concerned they had the female athlete triad. None of the athletes had been flagged during an initial medical screening.

The intervention model used by Trinity College has raised awareness about health risks of low body weight and energy restriction by using role playing, discussion and writing about the athlete-specific ideal of thinness compared to a healthy ideal. The study used a model based on cognitive behavioral therapy that contrasts beliefs with actual behavior in order to create cognitive dissonance, or disagreement, in an athlete's thinking so that they change their behavior.

Aside from such group interventions, the well-accepted approach to body composition for female athletes is still nutritional education for performance. When athletes learn how the different macronutrients affect training and recovery, they understand how critical it is to eat enough energy-rich foods to ensure glycogen repletion and tissue repair after workouts and competitions.

It is helpful to provide athletes with the information that healthy fats such as omega-3 fish oils are necessary to make up the outside layer of every single cell in the body. If they do not get enough of these essential fats, which can be

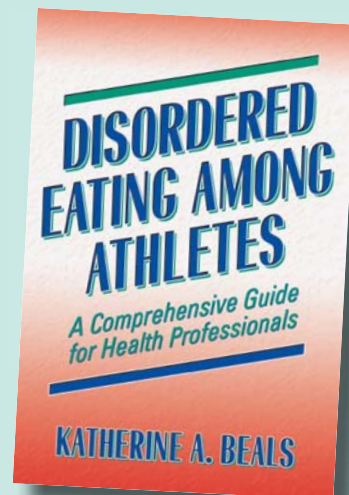
gotten from eating fish or organic meat, the consequence will be cells that are less receptive and potential problems with blood sugar regulation.

Protein is needed for repairing muscle and tissue after workouts and competitions. In addition, protein contains half as many calories as fat (on a gram-for-gram basis) and tends to promote greater satiety. This is part of the theory behind the high-protein diets that can be useful in promoting fat loss.

Researchers are just beginning to test whether high-protein diets are safe for strength and power athletes. A high-protein diet wouldn't be effective for endurance athletes such as rowers, distance runners or cyclists, who rely on carbohydrates in the form of stored muscle glycogen for energy when training.

An experienced registered dietitian (such as a certified specialist in sports dietetics) is the best resource a female athlete can have for ensuring optimal body composition for performance. Every female athlete in any particular sport has her own body type and traits, as well as unique nutrition needs and concerns about her body. The best choice in picking a dietitian for a female athlete is one who has experience working with other athletes in the same sport.

Resistance training with a periodized program such as the BFS Total Program is another essential tool for helping female athletes achieve the best body composition for their sports. Training allows them to gain muscle and strength, and having more muscle means a faster metabolism, which can help athletes lose body fat. In the ideal world, every female athlete would have a strength and conditioning coach as well as a nutritionist to guide them to achieve the best body composition for optimal performance. BFS



Resources

You can get more information about diet, body image and eating disorders in female athletes here:

- American College of Sports Medicine (ACSM)

www.acsm.org

ACSM provides position papers on the female athlete triad, nutrition and athletic performance, and exercise and fluid replacement.

- Association for Applied Sport Psychology (AASP)

www.appliedsportpsych.org

Use this site to find a certified consultant to assist with the performance enhancement needs of athletes.

- Female Athlete Triad Coalition
www.femaleathletetriad.org/

This site provides information regarding identification, management, treatment and prevention of the triad.

- Beals, Katherine A. (2004).
Disordered Eating Among Athletes

Champaign, Ill.: Human Kinetics.
Available at Amazon.



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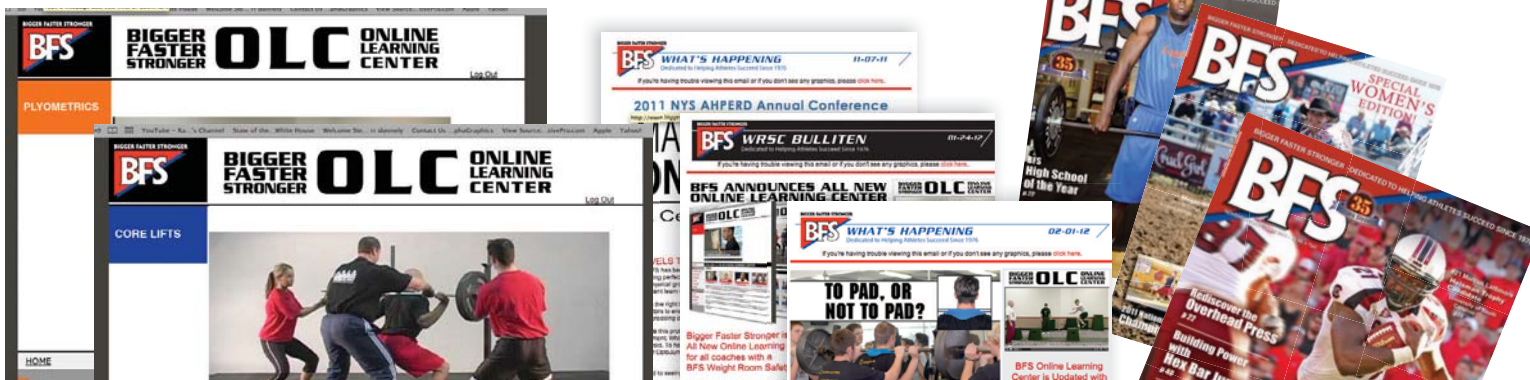
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