Conclusions

1. The majority of the athletes were asymptomatic, reporting normal eating patterns and no symptoms of eating disorders.

2. Even so, almost one-third reported experiencing either symptoms of disordered eating or had a diagnosable eating disorder.

3. Over half the athletes reported exercising in addition to their normal practices, specifically to burn calories and/or lose weight.

4. Fortunately, very few athletes reported using more severe forms of weight control, such as vomiting, laxatives, or diuretics.

5. Despite being physically active and fit and having bodies that may closely approximate the societal body ideal, the athletes were not immune to the negative influences of societal messages about how women should look and reported experiencing dissatisfaction with their bodies. This dissatisfaction was related to restrictions in what they ate and the experience of emotions, such as sadness, anger and guilt.

6. Pressures from coaches, teammates, and even fans regarding appearance and weight loss may negatively influence athletes' eating behaviors, leading to severe dietary restraint.

7. Such dietary restraint is associated strongly with actual symptoms of disordered eating and may be the primary cause of women developing EDs.

8. Student-athletes are highly invested, dedicated, goal-oriented individuals who are motivated to do well in their respective sports, and therefore, may be influenced by persuasive messages from others, such as coaches and teammates, that being/looking thinner might improve their athletic performance.

Recommendations for Coaches

1. Pay attention to your own attitudes, behaviors and messages about body size, weight, and performance expectations. Avoid linking improved sport performance to changes in weight.

2. Refrain from weighing your athletes. If weighing is medically necessary, have a sports medicine staff oversee it (e.g., a dietician, athletic trainer, physician). Never publically post or comment on athletes' weight or body size/shape.

3. Be aware of the signs and symptoms associated with disordered eating, such as excessive exercising perfectionism, and body dissatisfaction.

4. Create a healthy sport environment that limits perceived weight pressures. Focus on helping your athletes improve their skills, strategies for performances, strength and flexibility, aerobic capacity, and mental toughness. Rarely, if ever, should the focus be on weight loss. And, if that is medically necessary, have it overseen by your sports medicine staff.

5. Athletes should understand that engaging in eating-disordered behavior will not be tolerated on the team. Discourage dieting, which is a precursor to disordered eating and, instead, help your athletes learn to eat to be healthy and maximize their performances.

6. Avoid comparing athletes' bodies to one another, or making comments about athletes size and shape. This kind of dialogue can trigger "competitive thinness" in some athletes and lead an entire team to engage in unhealthy weight control behaviors. Athletes with different body sizes can be successful in the same sport.

7. For female athletes who are at risk (i.e., currently dissatisfied with their bodies), seek out education designed to teach athletes how to think differently about themselves, their bodies, their appearance, and their performances.

What to do if you suspect an athlete has disordered eating…

1. Talk with your athletic trainer to see what he/she has noticed. If there is consensus about the problem, decide who will talk to the athlete (it should be the person with the best relationship with the athlete).

2. Arrange a private meeting with the athlete and share your concerns. In this meeting, the focus should be on the athlete's health and emotional well-being, not on weight, body shape, or physical appearance.

3. In the meeting, be direct and straightforward. The bottom line message is that you care about the athlete as a person, want her to be well, and will assist her in getting help.

4. Have a referral ready for the athlete to see a physician, dietician or psychologist who can coordinate a multidisciplinary treatment team and provide the athlete with the help she needs.

Resources

NCAA Coaches Handbook: Managing the Female Athlete Triad & NCAA Coaches Handbook on Mental Health (www.ncaa.org)

National Eating Disorders Association—Coaches Toolkit (www.nationaleatingdisorderassociation.com)

Physical and Psychological Health of Female Collegiate Gymnasts and Swimmers

Sponsored by the NCAA Committee on Competitive Safeguards & Medical Aspects of Sport

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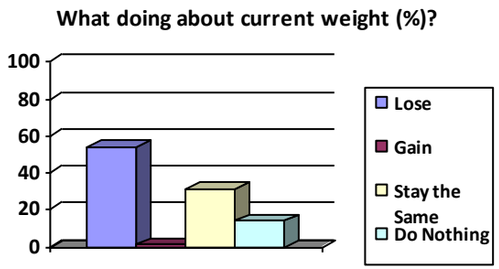
In Sept 2008 and again in March 2009, 414 collegiate gymnasts, swimmers and divers from 26 different universities around the country participated in an NCAA supported research study about the physical and psychological well-being of Division I female collegiate student-athletes. In this brochure, we present a summary of the results and provide recommendations for creating a healthier sport environment for female collegiate athletes.

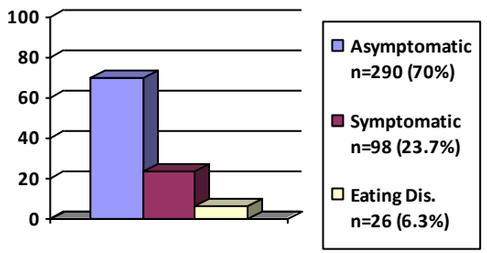
Sample Characteristics

Age: 19.14 GPA: 3.35
BMI: 22.54 kg/m^2
Receive athletic scholarship: 65%



Disordered Eating Prevalence

Based on the student-athlete responses on the Questionnaire for Eating Disorder Diagnosis (Q-EDD) they were classified as follows:



The majority of athletes were asymptomatic, meaning they reported no discernable symptoms of disordered eating. A sizable minority, though, were symptomatic and reported engaging in behaviors that are associated with an eating disorder.

For the athletes in the eating disordered category (n = 26), they were classified as having:

1. Subthreshold Bulimia (n = 20)
2. Non-Bingeing Bulimia (n = 4)
3. Binge Eating Disorder (n = 2)

In addition to establishing an actual eating disorder diagnosis, we identified their prevalence of pathogenic weight control behaviors, such as binge eating, vomiting, and excessive exercising. The prevalence rates are presented in the following table:

Frequency of Binge Eating (i.e., eat uncontrollably to the point of stuffing yourself)	***n***	**%**
- Once a week or more	57	13.8
Duration of Binge Eating	***n***	**%**
- 3 months to 3 years	81	19.6
Exercising to Burn Calories	***n***	**%**
- 1 hour or more per day	225	54.3
Trying to Lose Weight by Strict Dieting	***n***	**%**
- 2 or more times in past year	98	23.6
Intentionally Vomiting After Eating	***n***	**%**
- 2-3 times per month or more	16	3.6
Using Diuretics to Help Control Weight	***n***	**%**
- 2-3 times/month or more	9	2.1
Using Laxatives to Help Control Weight	***n***	**%**
- 2-3 times/month or more	14	3.3

Predictors of Disordered Eating

We examined the environmental and psychological variables that have been thought to predict which athletes would experience disordered eating. Based on the athletes' responses, the following conclusions were drawn:

1. Athletes are influenced negatively by general societal pressures, communicated by family, friends, and the media, to have a thin body and be attractive.

2. Athletes who adopt these societal ideals about female beauty and attractiveness are less satisfied with the size and shape of their bodies.

3. Pressures from the sport environment, including pressures from teammates, peers, and spectators to have a thin appearance, and pressures from coaches/sport to lose weight were associated strongly with athletes tendency to severely restrict their food intake.

4. Body dissatisfaction also contributed to the likelihood that athletes would restrict their food intake in an attempt to lose weight and more closely approximate the thin beauty ideal that exists in our culture.

5. Athletes who were dissatisfied with their bodies also reported feeling sad, angry, and guilty. In the end, athletes who experienced these negative emotions and who restricted their food intake were most likely to develop and maintain actual symptoms of eating disorders.