

Body Image in Elite Ballet Dancers

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Key Points:

- **Ballet's emphasis on specific body types and appearance-based critiques can lead to negative self-image and many professional dancers experience eating disorders.**
- **The overall prevalence of eating disorders in ballet is reported to be more than 16%²; this trend extends to elite ballet students aged 10–12¹.**
- **Poor nutrition during poses long-term risks including the Female Athlete Triad; strategies to mitigate eating disorders involve minimizing appearance critiques and creating supportive learning environments.**

Many sports such as ballet associate specific body types with success in the profession¹. One hypothesis is that ballet dancers are prone to disordered eating due to the importance placed upon a lean, petite physique by their teachers and artistic directors¹. A common thread throughout ballet classes are critiques relating to the dancer's body and appearance such as being able to "see the dancer's lunch". This pressure placed on their appearance during puberty leads to decreased self-efficacy and negative attitudes associated with their appearance^{1,2}.

A systemic review from *European Eating Disorders Review* found as many as 82.6% of professional ballet dancers experience an eating disorder over their lifetime including their training, professional career, and post-retirement². Professional ballet dancers only compose a small fraction of all ballet dancers. A meta-analysis found the overall prevalence of eating disorders (anorexia, bulimia, and binge eating) and eating disorders not otherwise specified (EDNOS) in all ballet dancers was 16.4% and 14.9%². The prevalence of eating disorders in ballet dancers is higher than that of general dancers (12%)². This difference may be explained by the higher incidence of appearance-based critiques associated with ballet as opposed to other styles of dance and the decreased self-confidence found in many of the athletes^{1,2}. The higher incidence of eating disorders among professional athletes versus all ballet dancers may be due to the pressure to maintain a certain look to receive a promotion or maintain their career. The difference may also be associated with the length of their careers.

Elite ballet students are also subject to the appearance-based demands of the sport. ENDOS are the most common form of eating disorder among ballet students, and it is estimated 20% of ballet students suffer from ENDOS². A study assessing ballet and artistic gymnastics students found that 10–12-year-old students had a higher incidence of unhealthy eating behaviors than their primary school counterparts¹. The study also found a correlation between the student's self-confidence, belief that a petite physique leads to professional success, and dietary self-restriction¹. Extreme self-restriction from food may contribute to improper nutrition, and other adverse outcomes.

Eating disorders in ballet students are especially concerning as improper nutrition during puberty may lead to adverse outcomes later in life. Poor nutrition in pubescent females may cause reduced bone mineral density (BMD), amenorrhea, and low available energy also known as the Female Athlete Triad^{1,3}. Female Athlete Triad causes delayed onset of puberty and may cause osteoporosis later in life. Eating disorders in male athletes may cause decreased testosterone production contributing to stunted growth along with low BMD³.

Some ways that we can lower the prevalence of eating disorders among ballet dancers are by limiting appearance-based critiques during classes and rehearsals, and blinding dancers to their weight and body

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measurements during costume fittings. For example, teachers could say, “engage your core” or “use your abdominals” instead of the appearance-centered comment, “I can see your lunch”. This comment instructs the dancer to use a specific muscle group instead of being derogatory about their body’s appearance. It is important that dance teachers create a supportive environment for their students to learn and gain self-confidence to prevent harmful habits from occurring.

	Ballet dancers <i>n</i> = 1729	All dancers <i>n</i> = 3337
Mean age	20.34 years	18.78 years
Eating disorders	16.4%	12.0%
Anorexia nervosa	4%	2.0%
Bulimia nervosa	2%	4.4%
EDNOS	14.9%	9.5%
Mean EAT-40	27.42	22.73
Mean EAT-26	3.03	3.54
Mean EDI	46.59	46.59
Drive for thinness (EDI)	15.78	6.21
Bulimia (EDI)	10.12	0.82
Body dissatisfaction (EDI)	17.24	13.06
EDE-Q	1.07	1.58

EDNOS, eating disorders not otherwise specified; EAT, Eating Attitude Test; EDI, Eating disorders Inventory; EDEQ, Eating Disorders Examination Questionnaire.

Figure 1: Breakdown of ballet dancers that meet the criteria for eating disorders compared to generic dancers².

References

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