
FIS Medical Committee Educational Series

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EATING DISORDERS & THE FEMALE TRIAD

There is a well-recognised risk of development of eating disorders (anorexia nervosa, bulimia) in both men and women, and the female triad of eating disorder, amenorrhea and osteoporosis in elite athletes who are following strict training regimes. Within FIS, the major concerns in connection with eating disorders arise in athletes involved in the FIS disciplines of ski-jumping/Nordic and cross-country.

Many female athletes feel that they are under pressure to meet unrealistic weight or body fat levels. Some may respond to this pressure with excessive dieting and slip into disordered eating, which in turn can lead to a serious eating disorder such as anorexia nervosa or bulimia nervosa. Disordered eating can lead to low energy availability (an energy intake inadequate to meet energy expenditure), which can disrupt the reproductive cycle and result in amenorrhoea. The combination of disordered eating and irregular menstrual cycles eventually lead to a decrease in endogenous oestrogen and other hormones, resulting in low bone mineral density hence the term '**Female Athlete Triad**'.

The **FIS MEDICAL COMMITTEE** draws the following points to the attention of all national federations:

A. PREVENTION

As part of the pre season health-care programme (which will include medical examination, blood test analysis, etc), and in order to identify early signs of sub-clinical eating disorders (in both men and women) and prevent the triad of eating disorder, amenorrhea and osteoporosis in women, we recommended that athletes from all the FIS disciplines (especially cross country and jumping) should complete the SELF REPORT questionnaire EAT-26, and understand the personal PROFILE that can indicate an eating disorder and the risk factors that potentially are related with it.

This questionnaire dates from 1982, but actually it contains the most important information to be gathered about eating disorders, and that is why all the most important articles continue to make reference to it.

It is crucial that the athletes who score 20 or more must have an individual CLINICAL INTERVIEW (psychology department).

B. INFORMATION

All support staff around the athlete should be fully aware not only of good nutritional practice but also of the potential triggers and early warning signs that can indicate an eating disorder. Having detected such a disorder, they should also know how to seek and provide appropriate treatment. There are two important documents for reference:

1. 'The role of adequate nutrition' (FIS publication)
2. 'IOC Consensus Statement on the Female Athlete Triad' – may be downloaded from the IOC website:

http://www.olympic.org/common/asp/download_report.asp?file=en_report_917.pdf&id=917

http://www.olympic.org/uk/organisation/commissions/medical/full_story_uk.asp?id=1540

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EATING ATTITUDES TEST

(EAT-26)

Height _____
 Current Weight _____
 Highest Weight (excluding pregnancy) _____
 Lowest Adult Weight _____

Do you participate in athletics at any of the following level:

- Intramural
- Inter-Collegiate
- Recreational
- High School teams

	Always	Usually	Often	Sometimes	Rarely	Never	Score
1. Am terrified about being overweight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
2. Avoid eating when I am hungry	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
3. Find myself preoccupied with food	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
4. Have gone on eating binges where I feel that I may not be able to stop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
5. Cut my food into small pieces	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
6. Aware of the calorie content of foods that I eat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
7. Particularly avoid foods with a high carbohydrate content (i.e. bread, rice, potatoes, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
8. Feel that others would prefer if I ate more	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
9. Vomit after I have eaten	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
10. Feel extremely guilty after eating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
11. Am preoccupied with a desire to be thinner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
12. Think about burning up calories when I exercise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
13. Other people think that I am too thin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
14. Am preoccupied with the thought of having fat on my body	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
15. Take longer than others to eat my meals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
16. Avoid foods with sugar in them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
17. Eat diet foods	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
18. Feel that food controls my life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
19. Display self-control around food	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
20. Feel that others pressure me to eat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
21. Give too much time and thought to food	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
22. Feel uncomfortable after eating sweets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
23. Engage in dieting behavior	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
24. Like my stomach to be empty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
25. Enjoy trying new rich foods	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____
26. Have the impulse to vomit after meals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	_____

Total Score (see below for scoring instructions) _____

PLEASE RESPOND TO EACH OF THE FOLLOWING QUESTIONS:

1) Have you gone on eating binges where you feel that you may not be able to stop? (Eating much more than most people would eat under the same circumstances)

No Yes How many times in the last 6 months? _____

2) Have you ever made yourself sick (vomited) to control your weight or shape?

No Yes How many times in the last 6 months? _____

3) Have you ever used laxatives, diet pills or diuretics (water pills) to control your weight or shape?

No Yes How many times in the last 6 months? _____

4) Have you ever been treated for an eating disorder?

No Yes When? _____

5) Have you recently thought of or attempted suicide?

No Yes When? _____

SCORING THE EATING ATTITUDES TEST

For all items **except #25**, each of the responses receives the following value:

Always = 3
Usually = 2
Often = 1
Sometimes = 0
Rarely = 0
Never = 0

For **item #25**, the responses receive these values:

Always = 0
Usually = 0
Often = 0
Sometimes = 1
Rarely = 2
Never = 3

- After scoring each item, add the scores for a total. If your score is over **20**, we recommend that you discuss your responses with a counselor (take your responses to the EAT with you to your first appointment).
- If you responded yes to any of the five YES/NO items on the bottom of the EAT, we also suggest that you discuss your responses with a counselor.