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Text box 1: Diagnostic Criteria for Anorexia Nervosa

ICD-10: F50.0 Anorexia nervosa

- A. Weight loss, or in children a lack of weight gain, leading to a body weight of at least 15% below the normal or expected weight for age and height.
- B. The weight loss is self-induced by avoidance of "fattening foods".
- C. A self-perception of being too fat, with an intrusive dread of fatness, which leads to a self-imposed low weight threshold.
- D. A widespread endocrine disorder involving the hypothalamic-pituitary-gonadal axis, manifest in the female as amenorrhoea, and in the male as a loss of sexual interest and potency (an apparent exception is the persistence of vaginal bleeds in anorexic women who are on replacement hormonal therapy, most commonly taken as a contraceptive pill).
- E. Does not meet criteria A and B of Bulimia nervosa (F50.2).

Comments (in ICD-10):

The following features support the diagnosis, but are not necessary elements: self-induced vomiting; self-induced purging; excessive exercise; use of appetite suppressants and/or diuretics.

If onset is pre-pubertal, the sequence of pubertal events is delayed or even arrested (growth ceases; in girls the breasts do not develop and there is a primary amenorrhoea; in boys the genitals remain juvenile). With recovery, puberty is often completed normally, but the menarche is late.

DSM-5: Anorexia Nervosa

To be diagnosed as having Anorexia Nervosa a person must display:

- Persistent restriction of energy intake leading to significantly low body weight (in context of what is minimally expected for age, sex, developmental trajectory, and physical health).
- Either an intense fear of gaining weight or of becoming fat, or persistent behaviour that interferes with weight gain (even though significantly low weight).
- Disturbance in the way one's body weight or shape is experienced, undue influence of body shape and weight on self-evaluation, or persistent lack of recognition of the seriousness of the current low body weight.

Subtypes:

Restricting type

Binge-eating/purging type

Text box 2: Diagnostic Criteria for Bulimia Nervosa

ICD 10: F50.2 Bulimia nervosa

A. Recurrent episodes of overeating (at least two times per week over a period of three months) in which large amounts of food are consumed in short periods of time.

B. Persistent preoccupation with eating and a strong desire or a sense of compulsion to eat (craving).

C. The patient attempts to counteract the fattening effects of food by one or more of the following:

(1) self-induced vomiting;

(2) self-induced purging;

(3) alternating periods of starvation;

(4) use of drugs such as appetite suppressants, thyroid preparations or diuretics.

When bulimia occurs in diabetic patients they may choose to neglect their insulin treatment.

D. A self-perception of being too fat, with an intrusive dread of fatness (usually leading to underweight).

DSM-5: Bulimia Nervosa

To be diagnosed as having Bulimia Nervosa a person must display:

- Recurrent episodes of binge eating. An episode of binge eating is characterised by both of the following:
 - Eating, in a discrete period of time (e.g. within any 2-hour period), an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances.
 - A sense of lack of control over eating during the episode (e.g. a feeling that one cannot stop eating or control what or how much one is eating).
- Recurrent inappropriate compensatory behaviour in order to prevent weight gain, such as self-induced vomiting, misuse of laxatives, diuretics, or other medications, fasting, or excessive exercise.
- The binge eating and inappropriate compensatory behaviours both occur, on average, at least once a week for three months.
- Self-evaluation is unduly influenced by body shape and weight.
- The disturbance does not occur exclusively during episodes of Anorexia Nervosa.

Text box 3: Other eating disorder diagnoses in ICD-10 and DSM 5

ICD-10:

F50.1 Atypical anorexia nervosa

F50.3 Atypical bulimia nervosa

F50.8 Other eating disorders

F50.9 Eating disorder, unspecified

DSM-5:

Binge Eating Disorder

To be diagnosed as having Binge Eating Disorder a person must display:

- Recurrent episodes of binge eating. An episode of binge eating is characterised by both of the following:
 - Eating, in a discrete period of time (e.g. within any 2-hour period), an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances.
 - A sense of lack of control over eating during the episode (e.g. a feeling that one cannot stop eating or control what or how much one is eating).
- The binge eating episodes are associated with three or more of the following:
 - eating much more rapidly than normal
 - eating until feeling uncomfortably full
 - eating large amounts of food when not feeling physically hungry
 - eating alone because of feeling embarrassed by how much one is eating
 - feeling disgusted with oneself, depressed or very guilty afterward
- Marked distress regarding binge eating is present
- Binge eating occurs, on average, at least once a week for three months
- Binge eating not associated with the recurrent use of inappropriate compensatory behaviours as in Bulimia Nervosa and does not occur exclusively during the course of Bulimia Nervosa, or Anorexia Nervosa methods to compensate for overeating, such as self-induced vomiting.

Note: Binge Eating Disorder is less common but much more severe than overeating. Binge Eating Disorder is associated with more subjective distress regarding the eating behaviour, and commonly other co-occurring psychological problems.

Pica

Rumination Disorder

Avoidant/Restrictive Food Intake Disorder (ARFID)

Other Specified Feeding or Eating Disorder (OSFED)

Purging Disorder

Night Eating Syndrome

Unspecified Feeding or Eating Disorder (UFED)

Table 1. Descriptive Summary of Sample and Questionnaire Scores

	N	Minimum	Maximum	Mean	SD
Age	47	12.14	21.36	16.70	2.46
BMI Centile	42	0.07	89.56	41.94	29.15
Rosenberg Self-Esteem	47	11.00	30.00	20.72	4.57
BDI	47	.00	28.00	8.79	5.54
EAT-26	47	.00	46.00	10.13	10.56
EDE-Q6 Global	47	.00	5.35	1.69	1.53
EDE-Q6 Restraint	47	.00	5.00	1.69	1.55
EDE-Q6 Eating Concern	45	.00	5.00	.89	1.24
EDE-Q6 Shape Concern	47	.00	6.00	2.15	1.87
EDE-Q6 Weight Concern	47	.00	5.80	1.95	1.84
EDE-Q6 Norms		Male	Female 16 +	Female < 16	
		(N= 16)	(N=18)	(N = 13)	
EDE-Q6 Global Norm		0.45	1.59	1.5	
(N,% above norm)		(5, 31%)	(12, 67%)	(8, 61%)	
EDE-Q6 Restraint		0.15	1.29	1.0	
(N,% above norm)		(9, 56%)	(14, 78%)	(7, 54%)	
EDE-Q6 Eating Concern Norm		0.69	0.87	2.2	
(N,% above norm)		(2, 12%)	(7, 39%)	(2, 15%)	
EDE-Q6 Shape Concern Norm		0.48	2.29	1.8	
(N,% above norm)		(6, 37%)	(12, 67%)	(9, 69%)	
EDE-Q6 Weight Concern Norm		0.44	1.89	1.6	
(N,% above norm)		(7, 44%)	(11, 61%)	(8, 61%)	

Note: EDE-Q6 Male norms are derived from Reas et. al.(29) Female 16 + norms from Mond et al.:(27) female <16 norms from Carter et al.(13).

Table 2: Bivariate Correlation (Ns range 44 – 51)

	1	2	3	4	5	6	7	8	9	10	11
1. Sex											
2. Level of Competition	-.04										
3. Age	.16	-.53**									
4. BMI centile	.13	-.28 [^]	.56**								
5. Rosenberg Self-Esteem	.42**	.02	-.06	-.06							
6. BDI	-.23	-.19	.25 [^]	.15	-.52**						
7. EAT-26	-.39**	-.11	-.07	-.05	-.11	.50**					
8. EDE-Q6 Global	-.53**	-.20	.06	-.05	-.21	.55**	.80**				
9. EDE-Q6 Restraint	-.45**	-.31*	.21	-.02	-.13	.53**	.80**	.90**			
10. EDE-Q6 Eating Concern	-.39**	-.14	-.01	-.13	-.03	.43**	.68**	.87**	.75**		
11. EDE-Q6 Shape Concern	-.53**	-.12	.07	-.02	-.34*	.56**	.74**	.96**	.81**	.77**	
12. EDE-Q6 Weight Concern	-.45**	-.18	.00	-.05	-.23	.51**	.78**	.96**	.83**	.77**	.93**

Key: ** = correlation significant at the 0.01 level (2-tailed); * = correlation significant at the 0.05 level (2-tailed); [^] = correlation marginally significant at the 0.10 level (2-tailed)

Table 3: Bivariate Correlation – female athletes (Ns range 22 – 31)

	1	2	3	4	5	6	7	8	9	10	11
1. Level of Competition											
2. Age	-.54**										
3. BMI centile	-.02	.40*									
4. Rosenberg Self-Esteem	-.20	-.17	-.12								
5. BDI	-.07	.27	.17	-.13							
6. EAT-26	-.12	-.04	.01	.28	.44*						
7. EDE-Q6 Global	-.25	.23	.08	.20	.55**	.76**					
8. EDE-Q6 Restraint	-.38*	.40*	.06	.29	.45*	.76**	.88**				
9. EDE-Q6 Eating Concern	-.18	.06	-.05	.34 [^]	.43*	.67**	.87**	.73**			
10. EDE-Q6 Shape Concern	-.17	.26	-.14	-.03	.61**	.69**	.95**	.74**	.75**		
11. EDE-Q6 Weight Concern	-.21	.15	.07	.17	.49**	.73**	.96**	.80**	.74**	.92**	
12. Menstrual status	-.29	.43*	.15	-.01	.04	.44*	.50*	.60**	.53*	.45*	.43*

Key: ** = correlation significant at the 0.01 level (2-tailed); * = correlation significant at the 0.05 level (2-tailed); [^] = correlation marginally significant at the 0.10 level (2-tailed)

Note: For the variable ‘Menstrual Status’, analysis was carried on the subgroup of all females (n=24) who remained after removing individuals who: provided information suggesting they definitely or may not have yet achieved menarche; failed to provide (sufficient) information about menstrual status; provided menstrual data that were unclear; or reported ingestion of hormonal medication. The subgroup divided into individuals who did/ did not reported missing menstrual periods in the last 4 months.

Table 4: Bivariate Correlation – male athletes (N = 16)

	1	2	3	4	5	6	7	8	9	10
1. Level of Competition										
2. Age	-.51*									
3. BMI centile	-.60*	.73**								
4. Rosenberg Self-Esteem	.42	-.11	-.13							
5. BDI	-.40	.36	.22	-.79**						
6. EAT-26	-.23	.07	.00	-.49	.66**					
7. EDE-Q6 Global	-.37	.02	-.03	-.51*	.71**	.75**				
8. EDE-Q6 Restraint	-.34	.11	.07	-.37	.68**	.81**	.93**			
9. EDE-Q6 Eating Concern	-.23	-.05	-.26	-.38	.50*	.27	.75**	.55*		
10. EDE-Q6 Shape Concern	-.36	.08	.05	-.48	.71**	.71**	.98**	.92**	.71**	
11. EDE-Q6 Weight Concern	-.37	-.12	-.06	-.61*	.62*	.74**	.91**	.76**	.59*	.85**

Key: ** = correlation significant at the 0.01 level (2-tailed); * = correlation significant at the 0.05 level (2-tailed)

Table 5: Sequential Multiple Regression Analyses: Predicting Eating Disorder Symptoms

Dependent Variable	EAT26 (N = 51)		EDE-Q6 Global (N = 51)		EDE-Q6 Restraint (N = 51)		EDE-Q6 Eating Concern (N = 49)		EDE-Q6 Shape Concern (N = 51)		EDE-Q6 Weight Concern (N = 51)	
	Beta	t	Beta	t	Beta	t	Beta	t	Beta	t	Beta	t
Predictors												
Rosenberg Self-Esteem	.35	2.41*	.30	2.32*	.37	2.79**	.44	2.85**	.15	1.21	.23	1.58
BDI	.63	4.42**	.57	4.52**	.56	4.31**	.58	3.88**	.49	3.99**	.52	3.74**
Sex	-.36	-2.71*	-.52	-4.44**	-.49	-4.11**	-.41	-2.67**	-.57	-5.00**	-.46	-3.58**
Age	-.23	-1.59	-.06	-.06	.06	.44	-.17	-1.12	.02	.13	-.14	-1.01
Level of Competition	-.14	-.98	-.16	-1.27	-.20	-1.63	-.16	-1.10	-.05	-.41	-.18	-1.32
% Variance	.37**		.50**		.49**		.34**		.53**		.41**	

Key: ** = correlation significant at the 0.01 level (2-tailed); * = correlation significant at the 0.05 level (2-tailed)