Eating Attitudes Test[©] (EAT-26): Scoring and Interpretation David M. Garner, Ph. D.

The Eating Attitudes Test (EAT-26) is probably the most widely used standardized measure of symptoms and concerns characteristic of eating disorders (Garner & Garfinkel, 1979; Garner, Olmsted, Bohr, & Garfinkel, 1982). The original EAT appeared as a Current Contents Citation Classic in 1993 (Garner, 1993). The 26-item version (Garner et al., 1989) is highly reliable and valid (Garner, Olmsted, Bohr, & Garfinkel, 1982; Lee et al., 2002; Mintz & O'Halloran, 2000). The EAT-26 alone does not yield a specific diagnosis of an eating disorder (neither the EAT-26, nor any other screening instrument, has been established as highly efficient as the sole means for identifying eating disorders).

Nevertheless, many studies have used the EAT-26 as an economical first step in a two-stage screening process. According to this methodology, individuals who score 20 or more on the test should be interviewed by a qualified professional to determine if they meet the diagnostic criteria for an eating disorder (Dotti & Lazzari, 1998; Patton, Johnson-Sabine, Wood, Mann, & Wakeling, 1990). If you have a low score on the EAT-26 (below 20), you still could have a serious eating problem, so do not let the results deter you from seeking help. The EAT-26 can be used in group or individual settings and is designed to be self-administered or be administered by health professionals, school counselors, coaches, camp counselors, and others with interest in gathering information to determine if an individual should be referred to a specialist for evaluation for an eating disorder.

The EAT-26 has been particularly useful a screening tool to assess "eating disorder risk" in high school, college and other special risk samples such as athletes (Garner, Rosen and Barry, 1998). Screening for eating disorders is based on the assumption that early identification of an eating disorder can lead to earlier treatment, thereby reducing serious physical and psychological complications or even death.

The EAT-26 items form three subscales: 1) Dieting, 2) Bulimia and Food Preoccupation, and 3) Oral Control. The subscale scores are computed by summing all items assigned to that particular scale:

Dieting scale items: 1, 6, 7, 10, 11, 12, 14, 16, 17, 22, 23, 24, 26. Bulimia & Food Preoccupation scale items: 3, 4, 9, 18, 21, 25. Oral Control subscale items: 2, 5, 8, 13, 15, 19, 20.

Because denial can be a problem on self-report screening instruments, low scores should not be taken to mean that either clinically significant eating disorders symptoms or a formal eating disorder is not present. Collateral information from parents, teammates, and coaches is useful information that can correct for denial, limited self-disclosure, and social desirability. High scores on self-report measures do not necessarily mean the respondent has an eating disorder; however, it does denote concerns regarding body weight, body shape, and eating. However, if you do have a high score, do not panic. It does not necessarily mean that you have a life-threatening condition and that you will have to immediately seek a form of treatment that may be uncomfortable. If you have a score of 20 or higher, this simply means that you should seek the advice of a qualified mental health professional who has experience with treating eating disorders.

In addition to the EAT-26 questions, identification of those at risk for eating disorders is based on information on the individual's body mass index (BMI) and behavioral symptoms reflective of an eating disorder. Following the methodology described for the Eating Disorder Inventory Referral Form (EDI-RF; Garner, 2004) four behavioral questions are included on this version of the EAT-26 aimed at determining the presence of extreme weight-control behaviors as well as providing an estimate of their frequency. These questions assess self-reported binge eating, self-induced vomiting, use of laxatives, and treatment for an eating disorder over the preceding 6 months. Although these content areas could be assessed in the same format as other items, this would not provide the type of frequency data required to evaluate the extent of the problem. Body Mass Index (BMI) is also computed and used to determine if the person is "significantly underweight" compared to age-matched norms. Generally a referral is recommended if a respondent scores "positively" on the EAT-26 items or meets the threshold on one or more of the behavioral criteria.

All self-report measures require open and honest responses in order to provide accurate information. The fact that most people provide honest responses means that the EAT-26 usually provides very useful information about the eating symptoms and concerns that are common in eating disorders.

Interpreting Eating Attitudes Test (Eat-26)® Scores

David M. Garner, Ph.D. (Suitable for On-Line Feedback)

The Eating Attitudes Test (EAT-26) is probably the most widely used test used to assess "eating disorder risk" based on attitudes, feelings, and behaviors related to eating and eating disorder symptoms. It was used as a screening instrument in the 1998 National Eating Disorders Screening program and has been used in many other studies to identify individuals with possible eating disorders. However, the EAT-26 does not provide a diagnosis of an eating disorder. A diagnosis can only be provided by a qualified health care professional.

The version of the Eating Attitudes Test (EAT-26) you have just completed has three criteria for determining if you should seek further evaluation of your risk of having an eating disorder. These are:

- 1) Your score on the actual EAT test items;
- 2) Low body weight compared to age-matched norms, and
- 3) Behavioral questions indicating possible eating disorder symptoms or recent significant weight loss.

If you meet one or more of these criteria, you should seek an evaluation by a professional who specializes in the treatment of eating disorders.

1) Your Eating Attitudes Test (EAT-26) is: ____

A score at or above 20 on the EAT-26 indicates a high level of concern about dieting, body weight or problematic eating behaviors. Because your score is above 20, you should seek an evaluation by a qualified health professional to determine if your score reflects a problem that warrants clinical attention. However, please keep in mind that high scores do not always reflect over-concern about body weight, body shape, and eating. Screening studies have shown that some people with high scores do not have eating disorders. Regardless of your score, if you are suffering from feelings which are causing you concern or interfering with your daily functioning, you should seek an evaluation from a trained mental health professional.

EAT-26 SCORE	Scoring System for the EAT-26										
	Always	Usually	Often	Sometimes	Rarely	Never					
Score for questions 1-25	3	2	1	0	0	0					
Score for question # 26	0	0	0	1 1	2	3					

Add the scores for each item together for a total score.

2) Your Body Mass Index (BMI) is: ____

If your BMI meets the criterion for "underweight", it is an important risk factor for a serious eating disorder. If your EAT-26 score is 20 or more, then this increases your likelihood of having a serious eating disorder. If your BMI indicates that you are neither "underweight" nor "extremely underweight" compared to age/gender-matched norms then you could still have a serious eating disorder. It just means that it is unlikely that you have anorexia nervosa. If you believe that your body weight is a problem, then it would be good for you to consult with a qualified health professional for further clarification. See the note below for further explanation of BMI.

A		4.0	4:4	40	40	4.4	4.5	40	4	70	40		24.
Age	9	10	11	12	13	14	15	16	1./	18	19	20	21+
Female (BMI)	14.0	14.5	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.0	18.5	19.0
107													
Male (BMI)	14.0	14.5	15.0	15.0	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0

3) Behavioral Questions:

If you scored in the any of the checked boxed ($\sqrt{}$), you should seek an evaluation from a trained mental health professional:

In the past 6 months have you:	Never	Once a month or less	2-3 times a month	Once a week	2-6 times a week	Once a day or more
Gone on eating binges where you feel that you may not be able to stop?	_		√	√	√	√
Ever made yourself sick (vomited) to control your weight or shape?		√	√	√	√	√
Ever used laxatives, diet pills or diuretics (water pills) to control your weight or shape?	0	√	√	√	√	√
Exercised more than 60 minutes a day to lose or to control your weight?		□				√
Lost 20 pounds or more in the past 6 months	Yes	√	No			

Please remember that the EAT-26 does not provide a diagnosis of an eating disorder. A diagnosis can only be provided by a qualified health care professional.

* Note on BMI: The EAT-26 includes specific questions on height, weight and gender that can be used to compute Body Mass Index (BMI) for the purpose of determining if you are "at risk" for an eating disorder because your body weight is extremely underweight according to age-matched population norms. BMI is a formula for estimating body mass that takes both height and weight into account. It is calculated by dividing weight (in kilograms) by height in meters, and then divided again by height in meters (kg/m2). Alternatively, BMI can be calculated as weight (in pounds) divided by height in inches, then divided again by height in inches and multiplied by 703. We recommend that you seek a professional evaluation for a possible eating disorder if your body weight is "extremely underweight" according to age-matched population norms.

Although BMI is a convenient and useful weight classification tool, it does have limitations. For example, BMI can overestimate fatness for people who are athletic. Also, some races, ethnic groups, and nationalities have different body fat distributions and body compositions; therefore, the norms used are not appropriate for all groups.

More Information on BMI

The National Health and Nutrition Examination Survey III (NHANES III, Kuczmarski, Ogden, et al., 2002) has collected reference data to establish weight and height norms at different ages for girls/women and boys/men from birth to 20 years old. These norms indicate that BMI varies considerably with age and gender with children between 5 to 8 years old having the lowest BMI values followed by a steady increase with age. The expected changes in BMI associated females and males as "underweight" (BMI between the 5th and 10th percentile for girls/women and boys/men from 9 to 20 years old) and "very underweight" (BMI less than the 5th percentile). A BMI cutoff of between the 5th and 10th percentile for different ages and sexes should be used to determine if you meet the "underweight" BMI referral criterion for referral. For men and women 21 years old and older, the "underweight" category according to the NHLBI (1998) survey data were used to determine the "underweight" criterion for referral.

You can easily determine if you meet the BMI thresholds in Table 1 by finding your height on the column on the left in Table 2 and the BMI on the bottom and follow the height and the BMI columns to where the intersect. This is the weight that you need to be at or below for the BMI you have selected.

Although BMI is a convenient and useful weight classification tool, it does have limitations. For example, BMI can overestimate fatness for people who are athletic. Also, some races, ethnic groups, and nationalities have different body fat distributions and body compositions; therefore, the NHANES data are not appropriate for all groups (Kuczmarski, Ogden, et al., 2002).

Age	9	10	11	12	13	14	15	16	17	18	19	20	20+
Female													
Very Underweight (less than or equal to)	13.5	14.0	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	17.5	17.5	18.5
Underweight (between)	13.6- 14.0	14.1- 14.5	14.1- 14.5	14.6- 15.0	15.1- 15.5	15.6- 16.0	16.1- 16.5	16.6- 17.0	17.1- 17.5	17.6- 18.0	17.6- 18.0	17.6- 18.5	18.6- 19.0
			11.	,	. Property	100							
Male													İ
Very Underweight (less than or equal to)	13.5	14.0	14.5	14.5	15.0	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5
Underweight (between)	13.6- 14.0	14.1- 14.5	14.6- 15.0	14.6- 15.0	15.1- 16.0	16.1- 16.5	16.6- 17.0	17.1- 17.5	17.6- 18.0	18.1- 18.5	18.6- 19.0	19.1- 19.5	19.6- 20.0
		***	Burney S	10	1.1	1944 1944 - M				1	1		

Table 2 Body Weight and Height to Calculate Body Mass Index (BMI)

Height				Height t			Weigh		,					
(in.)		an Maria Tanan	·					and Angley						
50	50	52	54	55	57	59	60	62	64	66	68	70	78	89
51	52	54	56	58	59	61	63	65	67	68	70	73	81	91
52	54	56	58	60	62	64	65	67	69	71	73	76	85	96
53	56	58	60	62	64	66	68	70	72	74	76	79	88	100
54	58	60	62	64	66	69	71	73	75	77	79	82	91	104
55	60	63	65	67	69	71	73	76	78	80	82	85	95	108
56	63	65	67	69	72	74	76	78	81	83	85	88	98	111
57	65	67	70	72	74	76	79	81	83	86	88	91	101	115
58	67	70	72	74	77	79	82	84	86	89	91	94	105	119
59	70	72	75	77	79	82	84	87	89	92	94	97	108	124
60	72	74	77	80	82	85	87	90	92	95	97	100	112	128
61	74	77	80	82	85	88	90	93	96	98	100	104	116	132
62	77	80	82	85	88	90	93	96	99	101	104	107	120	136
63	79	82	85	88	91	93	96	99	102	105	107	110	124	141
64	82	85	88	91	93	96	99	102	105	108	110	114	128	145
65	84	87	90	93	96	99	102	105	108	112	114	118	132	150
66	87	90	93	96	99	102	106	109	112	115	118	121	136	155
67	90	93	96	99	102	106	109	112	115	118	121	125	140	160
68	92	96	99	102	105	109	112	115	119 122	122 126	125 128	128 132	145 148	165 170
69 70	95 98	98 101	102 105	105 108	109 112	112 115	115 119	119 122	126	129	132	136	153	175
71	101	104	108	111	115	118	122	126	129	133	136	140	157	180
72	103	107	111	114	118	122	125	129	133	137	140	144	162	185
73	106	110	114	118	122	125	129	133	137	140	144	148	166	190
74	109	113	117	121	125	129	133	136	140	144	148	152	171	195
75	112	116	120	124	128	132	136	140	144	148	152	156	175	200
76	115	120	124	128	132	136	140	144	148	152	156	160	180	205
BMI (kg/m)	14.0	14.5	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	22.0	25.0

Table 3: 3d, 5 th and 10 th Percentiles for Females and Males by age from the NHANES										
		Female		Male						
		Percentile)	Percentile						
	3d	5th	10th	3d	5th	10th				
Age				-						
9	13.5	13.7	14.2	13.7	14.0	14.3				
10	13.7	14.0	14.5	14.0	14.2	14.6				
11	14.1	14.4	14.9	14.3	14.6	15.0				
12	14.5	14.8	15.4	14.6	14.9	15.4				
13	15.0	15.3	15.9	15.1	15.5	16.0				
14	15.4	15.8	16.4	15.7	16.0	16.5				
15	15.9	16.3	16.9	16.2	16.6	17.1				
16	16.4	16.8	17.4	16.8	17.1	17.7				
17	16.8	17.2	17.8	17.3	17.7	18.3				
18	17.2	17.6	18.2	17.9	18.2	18.9				
19	17.4	17.8	18.4	18.3	18.7	19.4				
20	17.4	17.8	18.5	18.7	19.1	19.8				

http://www.cdc.gov/nchs/about/major/nhanes/growthcharts/datafiles.htm

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