

for public assistance, and parental employment status (Neumark-Sztainer, Story, Hannan, & Croll, 2002). Race/ethnicity was assessed by asking “Do you think of yourself as (a) White, (b) Black or African American, (c) Hispanic or Latino, (d) Asian American, (e) Hawaiian or Pacific Islander, (f) American Indian or Native American, or (g) other race?” Participants were asked to check all that applied. For purposes of this analysis, all non-Whites were grouped together. Analyses were adjusted for race/ethnicity on the basis of this grouping.

*Data Analysis*

Data were weighted to adjust for differential response rates with the response propensity method (Little, 1986), in which the inverse of the estimated probability that an individual would respond at Time 2 was used as the weight. Estimates were therefore generalizable to the population represented by the original Time 1 Project EAT sample.

We used separate multiple logistic regression analyses to estimate odds ratios for Time 2 suicidal ideation and attempts. In unadjusted analyses, four Time 1 weight-related variables (weight status, body dissatisfaction, EWCB, and UWCB) were entered simultaneously. A second model adjusted for race, SES, and age group. This model was further adjusted for high depressive symptoms at Time 2, given that depression has been associated with suicidal behavior.

**Results**

Weight distribution, frequencies of EWCB and UWCB at Time 1, suicidal behavior at Time 2, and participant characteristics are shown in Table 1. UWCB were endorsed by the majority of young women (57.0%) and a large percentage of the

young men (31.1%). EWCB were less common (12.9% of young women and 3.9% of young men). Suicidal ideation was reported by 21.6% of young women (12.6% in the past year; 8.9% more than 1 year earlier) and by 15.2% of young men (8.3% in the past year; 7.0% more than 1 year earlier) at Time 2, whereas suicide attempts were reported by 8.7% of young women and 3.5% of young men at Time 2.

The unadjusted and adjusted relationships between Time 1 weight-related variables (weight status, body dissatisfaction, EWCB, and UWCB) and Time 2 suicidal ideation are shown in Table 2. For young women, EWCB were predictive of later suicidal ideation (odds ratio [OR] = 1.98, 95% confidence interval [CI] = 1.34–2.93). These ORs remained elevated even after we had adjusted for demographic variables and Time 2 depressive symptoms (OR = 1.79, 95% CI = 1.19–2.71). In contrast, among young men, the relationship between EWCB and suicidal ideation was not statistically significant. Furthermore, UWCB, body dissatisfaction, and weight status at baseline each failed to predict suicidal ideation at follow-up for male or female participants.

Table 3 shows the relationship between Time 1 weight status, body dissatisfaction, weight control behaviors, and Time 2 reported suicide attempts. Similarly, EWCB in young women was associated with a significantly elevated OR for suicide attempts (OR = 2.53, 95% CI = 1.53–4.18). These ORs remained elevated after we had adjusted for demographic variables and Time 2 depressive symptoms (OR = 2.41, 95% CI = 1.43–4.07). No association between suicide attempts and EWCB was found among young men. As with suicidal ideation, UWCB, body dissatisfaction, and weight status were not significantly associated with suicide attempts among either male or female participants over 5-year follow-up.

Table 1  
*Demographics and Key Variables by Gender*

Variable	Total		Male		Female	
	%	n	%	n	%	n
Gender	100.0	2,516	44.9	1,130	55.1	1,386
Age cohort (Time 2)						
High school	32.1	807	32.5	367	31.8	441
Young adult	67.9	1,709	67.5	763	68.2	946
Weight status (Time 1)						
<15th percentile	5.1	124	5.5	61	4.8	64
15th–85th percentile	64.0	1,562	64.4	711	63.6	851
85th–95th percentile	15.6	380	12.6	139	18.0	241
>95th percentile	15.4	375	17.5	193	13.6	182
EWCB (Time 1)	8.9	220	3.9	44	12.9	176
Diet pills	3.8	95	1.3	14	5.9	81
Self-induced vomiting	4.5	111	1.6	18	6.8	93
Laxatives	1.0	25	0.5	6	1.4	19
Diuretics	1.1	28	0.7	8	1.5	20
UWCB (Time 1)	45.3	1,125	31.1	347	57.0	778
Fasting	14.1	349	9.8	109	17.7	240
Eating very little	32.3	805	17.5	196	44.3	609
Food substitutes	8.0	200	5.5	62	10.1	138
Skipping meals	32.0	802	16.6	186	44.9	616
Cigarettes for weight control	7.0	174	4.0	45	9.4	129
Suicidal ideation (Time 2)	18.7	463	15.2	168	21.6	295
Suicidal attempts (Time 2)	6.4	157	3.5	38	8.7	119

Note. EWCB = extreme weight control behaviors; UWCB = unhealthy weight control behaviors.

**Table 2**

*Weight Status, Body Dissatisfaction, and Weight Control Behaviors at Time 1 and Suicidal Ideation at Time 2*

Variable	Unadjusted <sup>a</sup>		Adjusted for demographic variables <sup>b</sup>		Adjusted for demographic variables and Time 2 depression	
	OR	95% CI	OR	95% CI	OR	95% CI
Weight status						
Young men	0.97	0.78, 1.21	0.94	0.75, 1.19	0.95	0.74, 1.22
Young women	1.06	0.88, 1.26	1.02	0.85, 1.23	1.02	0.85, 1.23
Body dissatisfaction						
Young men	0.88	0.50, 1.54	0.99	0.56, 1.75	0.67	0.36, 1.24
Young women	1.06	0.77, 1.46	1.02	0.74, 1.42	0.93	0.67, 1.30
UWCB						
Young men	0.81	0.54, 1.24	0.77	0.50, 1.19	0.62	0.39, 1.00
Young women	0.89	0.65, 1.21	0.93	0.68, 1.27	0.82	0.59, 1.13
EWCB						
Young men	1.36	0.55, 3.36	1.73	0.69, 4.37	1.66	0.62, 4.43
Young women	1.98	1.34, 2.93	2.00	1.34, 2.99	1.79	1.19, 2.71

*Note.* OR = odds ratio; CI = confidence interval; UWCB = unhealthy weight control behaviors; EWCB = extreme weight control behaviors.

<sup>a</sup> Four weight-related variables entered simultaneously. <sup>b</sup> Adjusted for race, socioeconomic status, and age group.

### Discussion

The results of this study show that, in young women but not in young men, EWCB at baseline were predictive of suicidal ideation and suicide attempts at 5-year follow-up independent of depressive symptoms. Contrary to our hypotheses, body dissatisfaction, UWCB, and weight status were not predictive of suicidal behavior 5 years later in male or female participants.

These findings are consistent with the results of several previous studies that have shown an association between both syndromal eating disorders (Harris & Barraclough, 1994) and limited eating

disorder symptoms and suicidal behaviors (Crow et al., 2008; Miotto, De Coppi, Frezze, & Preti, 2003). Previous studies were cross-sectional, however, and the current study indicates that EWCB are predictive of suicidal ideation and suicide attempts over time. Our results suggest that EWCB might be a risk factor or risk marker for later suicidality. Although the rates of suicidal ideation and attempts endorsed by participants were high, they were in the range of those reported in other community-based studies (Centers for Disease Control, 2000; Kessler et al., 1999).

**Table 3**

*Weight Status, Body Dissatisfaction, and Weight Control Behaviors at Time 1 and Suicide Attempts at Time 2*

Variable	Unadjusted <sup>a</sup>		Adjusted for demographic variables <sup>b</sup>		Adjusted for demographic variables and Time 2 depression	
	OR	95% CI	OR	95% CI	OR	95% CI
Weight status						
Young men	1.18	0.80, 1.76	1.16	0.78, 1.74	1.19	0.78, 1.81
Young women	1.28	1.00, 1.64	1.18	0.92, 1.53	1.17	0.91, 1.51
Body dissatisfaction						
Young men	1.70	0.72, 4.01	1.76	0.74, 4.20	1.14	0.45, 2.89
Young women	1.05	0.67, 1.66	1.05	0.66, 1.67	1.02	0.64, 1.62
UWCB						
Young men	1.10	0.51, 2.39	1.09	0.50, 2.38	0.95	0.42, 2.12
Young women	1.23	0.77, 1.98	1.26	0.78, 2.03	1.14	0.71, 1.86
EWCB						
Young men	3.19	1.01, 10.13	3.15	0.97, 10.22	2.95	0.86, 10.07
Young women	2.53	1.53, 4.18	2.70	1.62, 4.51	2.41	1.43, 4.07

*Note.* OR = odds ratio; CI = confidence interval; UWCB = unhealthy weight control behaviors; EWCB = extreme weight control behaviors.

<sup>a</sup> Four weight-related variables entered simultaneously. <sup>b</sup> Adjusted for race, socioeconomic status, and age group.

■ **Table 5.8.** Sample Table Including Confidence Intervals With Brackets

Table X

*Weight Status, Body Dissatisfaction, and Weight Control Behaviors at Time 1 and Suicidal Ideation at Time 2*

Variable	Unadjusted <sup>a</sup>		Adjusted for demographic variables <sup>b</sup>	
	OR	95% CI	OR	95% CI
Weight status				
Young men	0.97	[0.78, 1.21]	0.94	[0.75, 1.19]
Young women	1.06	[0.88, 1.26]	1.02	[0.85, 1.23]
Body dissatisfaction				
Young men	0.88	[0.50, 1.54]	0.99	[0.56, 1.75]
Young women	1.06	[0.77, 1.46]	1.02	[0.74, 1.42]
UWCB				
Young men	0.81	[0.54, 1.24]	0.77	[0.50, 1.19]
Young women	0.89	[0.65, 1.21]	0.93	[0.68, 1.27]
EWCB				
Young men	1.36	[0.55, 3.36]	1.73	[0.69, 4.37]
Young women	1.98	[1.34, 2.93]	2.00	[1.34, 2.99]

*Note.* OR = odds ratio; CI = confidence interval; UWCB = unhealthy weight control behaviors; EWCB = extreme weight control behaviors. Adapted from "Are Body Dissatisfaction, Eating Disturbance, and Body Mass Index Predictors of Suicidal Behavior in Adolescents? A Longitudinal Study," by S. Crow, M. E. Eisenberg, M. Story, and D. Neumark-Sztainer, 2008, *Journal of Consulting and Clinical Psychology*, 76, p. 890. Copyright 2008 by the American Psychological Association.

<sup>a</sup>Four weight-related variables entered simultaneously. <sup>b</sup>Adjusted for race, socioeconomic status, and age group.

A *probability note* indicates how asterisks and other symbols are used in a table to indicate *p* values and thus the results of tests of statistical hypothesis testing. For results of statistical significance testing in text and tables, report the exact probabilities to two or three decimal places (e.g.,  $p = .023$  as opposed to  $p < .05$ ; see Table 5.7 and section 4.35). When displaying the result in graphical modes (including certain tables such as tables of correlation matrices), it may be difficult to follow this recommendation without making the graphic unruly. Therefore, when displaying results graphically, revert to reporting in the " $p <$ " style if using exact probabilities would make it difficult to comprehend the graphic. When discussing the results in the text, use exact probabilities regardless of the display mode. Include a probability note only when relevant to specific data within the table.

If the " $p <$ " style is required, asterisks indicate ranges of *p* values. Assign the same number of asterisks from table to table within your paper, such as  $*p < .05$ ,  $**p < .01$ , and  $***p < .001$ . Do not use any value smaller than  $***p < .001$ .