Supplementary Table 1.1

**Article Title:** Prevalence, incidence, and natural course of anorexia and bulimia nervosa among adolescents and young adults

**Authors:** Michaela Nagl, Corinna Jacobi, Martin Paul, Katja Beesdo-Baum, Michael Höfler, Roselind Lieb, Hans-Ulrich Wittchen

**Correspondence:** corinna.jacobi@tu-dresden.de (Corinna Jacobi)

Table ST1.1. Operationalization in the DSM-IV/M-CIDI criteria for eating disorders

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Operationalization from the DIA-X/M-CIDI version 2.2 as applied at baseline assessment</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Threshold anorexia nervosa</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. A refusal to maintain body weight at or above a minimally normal weight for age and height (e.g. weight loss leading to a maintenance of body weight less than 85% of that expected; or failure to make expected weight gain during period of growth, leading to body weight less than 85% of that expected).</td>
<td>Lowest body weight equal to or less than 10th percentile of age- and gender-specific and nationally representative reference data as determined by H5. What was the lowest body weight you ever had after the age of fourteen? H5B. How tall were you at that time</td>
<td>DANOA</td>
</tr>
<tr>
<td>B. Intense fear of gaining weight or becoming fat, even though underweight.</td>
<td>YES on H7. At the time you had your lowest body weight / other people said that you were too thin were you very afraid that you might gain weight?</td>
<td>DANOB</td>
</tr>
<tr>
<td>C. Disturbance in the way in which one’s body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of the current low body weight.</td>
<td>YES on at least one of the following questions At the time you had your lowest body weight / other people said that you were too thin… H8A. Did you feel like you were heavier than you should have been or heavier than you wanted to be? H8B. Did you think that some parts of your body were too fat? H8C. Did you feel like your self-esteem or confidence depended on your body shape or weight more than in other people? H8D. Did anyone tell you that your low weight was bad for your health, although you did not agree?</td>
<td>DANOC</td>
</tr>
<tr>
<td>D. In postmenarcheal females, amenorrhea, i.e., the absence of at least three consecutive menstrual cycles. (A woman is considered to have amenorrhea if her</td>
<td>For females, YES on H11. Around the time you had your lowest body weight or other people said that you were too thin did you ever have three months or more when you stopped having your menstrual periods?</td>
<td>DANOD</td>
</tr>
<tr>
<td>Periods occur only following hormone, e.g., estrogen, administration.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subthreshold anorexia nervosa</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All diagnostic criteria for DSM-IV threshold anorexia nervosa are met except for the criterion “amenorrhea” (criterion D) and criteria for any threshold ED are not met.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All diagnostic criteria for DSM-IV threshold anorexia nervosa are met except for criterion A. However, BMI had to be below the 20th percentile of age- and gender-specific and nationally representative reference data and criteria for any threshold ED are not met.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DANOA + DANOB + DANOC <strong>AND NOT</strong> any threshold ED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DANOB+DANOC+DANOD <strong>AND</strong> lowest body weight equal to or less than 20th percentile of age- and gender-specific and nationally representative reference data <strong>AND NOT</strong> any threshold ED</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Symptomatic anorexia nervosa</strong> ****</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criterion A plus one other criterion (B, C, or D)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DANOA + DANOB <strong>OR</strong> DANOA+DANOC <strong>OR</strong> DANOA+DANOD</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Threshold bulimia nervosa</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Recurrent episodes of binge eating. An episode of binge eating is characterized by both of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) eating, in a discrete period of time (e.g., within any</td>
<td></td>
<td></td>
</tr>
<tr>
<td>YES on H12. Did you ever have a time in your life during which you ate large amounts of food in a discrete period of time, i.e., did you have binge eating episodes?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DBULA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

H6. When was the first time that you lost so much weight or other people said you were too thin?

H9. How did you manage to lose so much weight / to maintain your weight low? Did you…

H9A. avoid fattening foods?
H9B. exercise excessively?
H9C. take diuretics?
H9D. take medicines?
H9E. make yourself vomit?
H9F. take laxatives or enemas?
H9G. When did you use [H9A to H9F] the last time?

onset and recency
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

(2) 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)

NO on H13. Does the patient report small amounts of food (e.g., a yogurt of a bar of chocolate)?

YES on H17. During binges, did you feel that your eating was out of control?

B. Recurrent inappropriate compensatory behavior in order to prevent weight gain, such as self-induced vomiting; misuse of laxatives, diuretics, enemas or other medications; fasting; or excessive exercise.

YES on at least one of the following:
Did you ever regularly engage in any of the following behaviors after binge eating in order to control your weight…
H21A. Did you go on strict diets?
H21B. Did you exercise excessively?
H21C. Did you use diuretics?
H21D. Did you use medications?
H21E. Did you make yourself throw up?
H21F. Did you use laxatives or enemas?
H21G. Did you fast by not eating at all or only taking liquids?

DBULB

C. The binge eating and inappropriate compensatory behaviors both occur, on average, at least twice a week for 3 months.

YES on H14. Did you ever have at least two binges per week?
H15 ≥3months. How long was the period during which you had at least two binges per week?

DBULC

D. Self-evaluation is unduly influenced by body shape and weight.

YES on H19. During the time when you were binge eating, did you feel that your self-esteem and was dependent on your weight or body shape?

DBULD

E. The disturbance does not occur during episodes of anorexia nervosa.

In the presence of anorexia, the onset of bulimia has to be first, or the recency of bulimia must be after the recency of anorexia, otherwise bulimia will be excluded
Onset/recency bulimia: H16. When was the first/last time that you had about two binges a week?

DBULE

Subthreshold bulimia nervosa*

All diagnostic criteria for DSM-IV threshold bulimia nervosa are met except for criterion C. Two weekly binge eating episodes occur less than three months and criteria for any threshold ED or subthreshold AN are not met.

DBULA+DBULB+DBULD AND H15<3 months AND NOT any threshold ED or subthreshold AN

OR

OR
All diagnostic criteria for DSM-IV threshold bulimia nervosa are met except for criterion B. Inappropriate compensatory behaviors occur less than two times a week over three months and criteria for any threshold ED subthreshold AN are not met.

**Symptomatic bulimia nervosa (any binge eating)**

Criterion A. Recurrent episodes of binge eating

Abbreviations: DIA-X/M-CIDI, computer-assisted Munich-Composite International Diagnostic Interview

*Subthreshold anorexia nervosa and subthreshold bulimia nervosa account for a subset of the DSM-IV EDNOS (eating disorder not otherwise specified category)

**Research criteria proposed in the paper for symptomatic anorexia and bulimia nervosa, not specified in the DSM-IV. Definitions of symptomatic anorexia and bulimia were based on the structure of the DIA-X/M-CIDI and its skipping rules. Due to the implementation of skipping rules the DIA-X/M-CIDI does not allow for the assessment of other AN criteria (B to D) independently from AN criterion A. Furthermore, the M- DIA-X/M-CIDI does not allow for assessing other BN criteria (B to E) independently from BN criterion A. Symptomatic AN was defined as AN criterion A (underweight) plus one further AN criterion to ensure that weight loss was not only due to physical complications but also to fear of weight gain or other weight and shape concerns typical for AN.

1 Source: Wittchen H-U, Pfister H (1997) DIA-X-Interviews: Manual für Screening-Verfahren und Interview; Interviewheft Längsschnittuntersuchung (DIA-X-Lifetime); Ergänzungsheft (DIA-X-Lifetime); Interviewheft Querschnittuntersuchung (DIA-X-12 Monate); Ergänzungsheft (DIA-X-12 Monate); PD-Programm zur Durchführung des Interviews (Längs- und Querschnittuntersuchung); Auswertungsprogramm. Swetz & Zeitlinger, Frankfurt

Diagnostic hierarchy rules:

a) threshold AN takes precedence over threshold BN
b) any threshold ED takes precedence over any subthreshold ED
c) subthreshold AN takes precedence over subthreshold BN
d) symptomatic AN /BN lack hierarchical exclusion rules and were diagnosed regardless of whether an individual was diagnosed another threshold or subthreshold ED subtype

This version of the DIA-X/M-CIDI does not assess information on recency or duration of inappropriate compensatory behaviors. We did not consider binge eating disorder in the paper as missing onset and recency information on compensatory behaviors does not allow for a specific distinction between bulimia nervosa and binge eating disorder, especially with regard to subthreshold bulimia. Due to missing frequency and onset and recency information on purging behavior and the fact that because of skipping-rules (H14) purging behavior cannot be assessed in the absence of binge eating, purging disorder cannot be defined.