Assessing Disordered Eating in the Youth Risk Behavior Survey (YRBS)

Best Practices and Recommendations for Item Selection

The public health burden of disordered eating. Eating disorders are serious mental illnesses that are characterized by significant disturbances to one's eating patterns and/or body image and they represent a growing public health threat for U.S. youth [1]. These disorders, which include anorexia nervosa, bulimia nervosa, and binge eating disorder, affect 7% of adolescents [2,3] and are associated with long-lasting adverse medical consequences spanning from cardiovascular complications, bone loss, and endocrine abnormalities to depression, anxiety, suicidality, and substance use [4,5]. They are also known to result in considerable psychosocial disability, reduced quality of life, and substantially elevated mortality [2,6]. Even when diagnostic criteria are not met, subthreshold symptoms and behaviors (e.g., binge eating, purging) can cause similar levels of impairment [7] and are highly prevalent, affecting 10% of boys and 23% of girls aged 14–18 [8]. Concerningly, these numbers have only increased since 2020 as a result of the COVID-19 pandemic and ongoing youth mental health crisis [9,10], as well as the prevailing influence of weight stigma [11]. At the population-level, the full spectrum of disordered eating costs the U.S. economy \$65 billion per year in productivity losses and healthcare expenditures [12,13], underscoring the substantial burden that these outcomes put on individuals, families, and society.

Urgent need for surveillance. Comprehensive, up-to-date surveillance data on disordered eating are urgently needed to **inform treatment and prevention efforts**. To help achieve this goal, this resource has been developed by a multi-state Eating Disorder Public Health Surveillance Working Group and contains evidence-based, **best practice recommendations** for the selection and prioritization of disordered eating questions in state-specific YRBS surveys. Its aims are to support YRBS Coordinators who are deciding to prioritize the assessment of disordered eating in their survey, while simultaneously navigating decisions about which symptoms and behaviors to assess within the often limited number of available question slots.

References

- 1. Klump, et al. Eating disorders are serious mental illnesses. Int J Eat Disord. 2009.
- 2. Swanson, et al. Prevalence and correlates of eating disorders in adolescents. Arch Gen Psychiatry. 2011.
- 3. Ward, et al. Estimation of eating disorders prevalence by age and associations with mortality. JAMA Netw Open. 2019.
- $4. \, Peebles, \, et \, al. \, \, Medical \, complications \, of \, eating \, disorders \, in \, youth. \, \, Child \, Adolesc \, Psychiatr \, Clin \, N \, Am. \, 2019.$
- 5. Hambleton, et al. Psychiatric and medical comorbidities of eating disorders. J Eat Disord. 2022.
- $6. van\ Hoeken, et\ al.\ Review\ of\ the\ burden\ of\ eating\ disorders.\ Curr\ Opin\ Psychiatry.\ 2020.$
- 7. Kärkkäinen, et al. Do disordered eating behaviours have long-term health-related consequences? Eur Eat Disord Rev. 2018.
- 8. Chin, et al. Trends and correlates of unhealthy dieting behaviours among adolescents. BMC Public Health. 2018.
- 9. Devoe, et al. The impact of the COVID-19 pandemic on eating disorders: A systematic review. Int J Eat Disord. 2023.
- 10. Radhakrishnan, et al. Pediatric emergency department visits associated with mental health. MMWR Morb Mortal Wkly Rep. 2022.
- 11. Menzel JE, et al. Appearance-related teasing, body dissatisfaction, and disordered eating. Body Image. 2010.
- 12. Streatfeild, et al. Social and economic cost of eating disorders in the United States. Int J Eat Disord. 2021.
- 13. Economic Costs of Eating Disorders by State. https://www.hsph.harvard.edu/striped/economic-costs-of-eating-disorders-by-state/









Recommendations for Item Selection

1 question slot available:

Binge Eating: During the past 30 days, on how many days did you eat an unusually large amount of food in a short period of time and experience a loss of control over how much you were eating or a feeling that you could not stop eating even when full? A. 0 days; B. 1 or 2 days; C. 3 to 5 days; D. 6 to 9 days; E. 10 to 19 days; F. 20 to 29 days; G. All 30 days.

Rationale: This question will estimate the prevalence of binge eating, which is the most common form of disordered eating among U.S. youth. Binge eating is a core symptom of bulimia nervosa (BN) and binge eating disorder (BED) is a high-risk disordered eating behavior in its own right that disproportionately affects racial/ethnic minority youth, LGBTQ+ youth, and youth experiencing food insecurity.

2 question slots available:

Add Composite Restrictive Disordered Eating: During the past 30 days, on how many days did you try to control your shape or weight by fasting or skipping meals; taking diet pills or supplements not prescribed by a doctor; or vomiting or taking laxatives? A. 0 days; B. 1 or 2 days; C. 3 to 5 days; D. 6 to 9 days; E. 10 to 19 days; F. 20 to 29 days; G. All 30 days.

Rationale: This question will estimate the prevalence of restrictive-type disordered eating behaviors. These behaviors often co-occur and can cause severe and sometimes long-lasting negative health consequences, including cardiovascular complications, bone loss, endocrine abnormalities, and neurological issues. They are also strongly associated with anxiety, depression, suicidality, and substance use and are among the strongest predictors of a future eating disorder diagnosis (especially anorexia nervosa) among youth in the U.S.

3 question slots available:

Add Weight Victimization: During the past 12 months, have you ever been the victim of teasing or name calling because of your weight, size, or physical appearance? A. Yes; B. No.

Rationale: This question will estimate the prevalence of victimization based on weight or shape, which is a robust predictor of disordered eating among youth. Importantly, girls, racial/ethnic minority youth, LGBTQ+ youth, and youth of higher weight status are most likely to be the targets of weight- or shape-related teasing or name calling, making this factor a recognized social determinant of disparities in disordered eating outcomes.

4 question slots available:

Add Purging, Diet Pill Use, <u>OR</u> Fasting: During the past 30 days, did you vomit or take laxatives to lose weight or to keep from gaining weight? A. Yes; B. No. During the past 30 days, did you take any diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight? (Do not count meal replacement products such as Slim Fast.) A. Yes; B. No. During the past 30 days, did you go without eating for 24 hours or more (also called fasting) to lose weight or to keep from gaining weight? A. Yes; B. No.

Rationale: These questions will provide more granular data on the prevalence of a specific restrictive-type disordered eating behavior, which may be relevant in some contexts.