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#### Health Behaviors and their Impact on Bariatric Surgery

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#### Summer Undergraduate **Research Program**

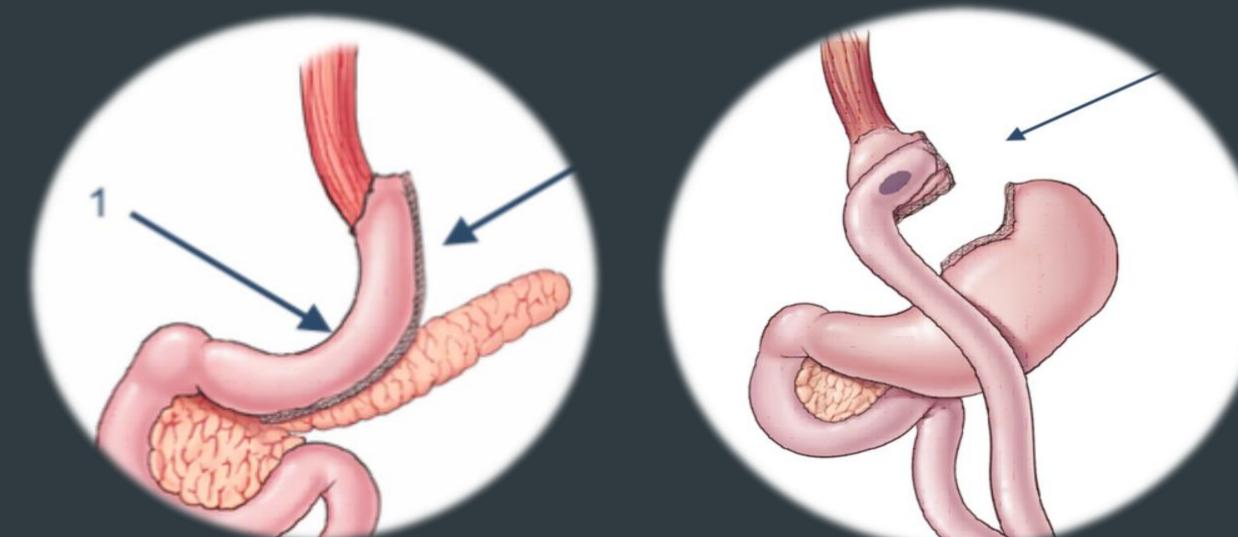
### BACKGROUND

- Nationally **obesity** prevalence and severity continues to increase.
- People with severe obesity (BMI range <40) are more susceptible to other diseases and lower quality of life.
- Obesity-related comorbidities: type 2 diabetes, hypertension, heart disease, respiratory disorders, cancer, strokes, gastroesophageal reflux disease, bone and joint damage.
- Metabolic and bariatric surgery is the most effective and longlasting treatment for severe obesity.

#### **PREOPERATIVE EVALUATION & SURGERY**

Sleeve Gastrectomy **(SG)** 

**Roux-en-Y Gastric Bypass** (RYGB)



Images from the ASMBS

- SG and RYGB are two of the most common types of procedure
- Psychological assessments are given prior to surgery to determine appropriate bariatric surgery candidates
- Can identify problematic eating and lifestyle behaviors before surgery but not always
- SG is restrictive
- RYGB is both restrictive and malabsorptive
- Both require permanent, lifelong changes
- Patients need lifelong follow-up after surgery

### PURPOSE

The purpose of this review was to analyze preoperative surgery assessments for health behaviors including binge eating disorder (BED), nocturnal eating syndrome (NES), and alcohol use disorder (AUD).

# Health Behaviors and their Impact on Bariatric Surgery

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# Psychological factors have the potential to affect long-term weight loss surgery.

	ASSESSMENT DESCRIPTION	
EDE-Q	<ul> <li>28-items</li> <li>Focus on Restraint, Shape Concern, Eating Concern, and Weight Concern, and a global score</li> <li>High scores can indicate problem eating behaviors and attitudes</li> <li>Assesses for Binge-eating Disorder (BED) Anorexia Nervosa, Bulimia Nervosa, and eating disorder</li> </ul>	<ul> <li>T</li> <li>A</li> <li>t</li> <li>d</li> <li>T</li> </ul>
QEWP-R	<ul> <li>15-items</li> <li>Focus primarily on the assessment of binge eating disorder (BED) as well as or other eating habits</li> <li>Can be taken as an interview based, phone call, or on paper</li> <li>Assesses for Binge-eating Disorder (BED) and Bulimia Nervosa</li> </ul>	<ul> <li>T</li> <li>a</li> <li>is</li> <li>S</li> <li>u</li> </ul>
	<ul> <li>10-items</li> <li>Focuses on the relationship and consumption of alcohol</li> <li>Low scores indicate low problematic behavior and risk</li> <li>Assesses for alcohol use disorder (AUD)</li> </ul>	<ul> <li>A</li> <li>ir</li> <li>C</li> <li>a</li> <li>1</li> <li>n</li> <li>A</li> <li>s</li> <li>A</li> <li>s</li> <li>A</li> <li>a</li> </ul>
NEQ	<ul> <li>14-items</li> <li>Focuses on eating habits at different points of the day</li> <li>The assessment focuses on psychological and behavioral symptoms of nocturnal eating syndrome (NES) and differentiation of NES from BED.</li> </ul>	<ul> <li>A</li> <li>N</li> <li>T</li> <li>N</li> <li>a</li> </ul>

#### **STUDY FINDINGS**

he diagnosis sensitivity of the EDE-Q can range rom 27.8% to 84.3% for the DSM5 A study compared EDE-Q to other assessments including he QEWP-R and show that EDE-Q has a greater liagnosis as well as more consistency he test is used across multiple studies, and its use varies

The QEWP has similar responses in scoring at an interview-based level as the EDE. However, the QEWP s more specific and should only be used for BED Study was able to find a lack of correlation between pinge eating and alcoholism in a long term follow up ising the QEWP-R and AUDIT

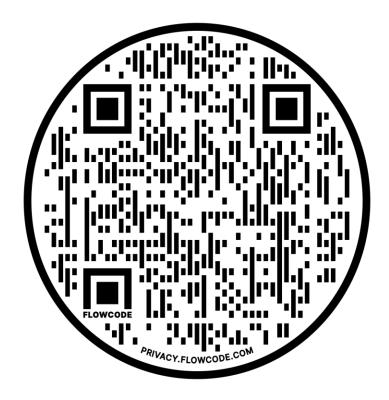
A nocturnal eating connection to alcoholism was found n post-surgical Roux-en-Y Gastric Bypass Surgery One year after surgery alcohol consumption decreased is well as scored in the AUDIT

- year post sleeve gastrectomy showed no transfer addiction
- AUDIT prevalence was greater in the second-year post surgery
- After 3 years patients regardless of surgery are at greater risk of interacting with alcohol
- A study show that greater NEQ scores were associated with lower percent weight loss as well as matching high scores in other tests as the EDE
- Severe obese night eaters seeking bariatric surgery show higher scores than candidates without NES
- here is a strong correlation between NES scores and Nocturnal eating diagnosis questionnaire (NEDQ) as well as Binge Eating Scale (BES) scores

- Inclusion criteria:
- Have a validated health behavior assessment
- Bariatric surgical intervention
- Peer-reviewed journal
- Published last 15 years • English language or a translation available
- Key words searched in Psych Info and Google Scholar for bariatric surgery; weight loss surgery; EDEQ; NEQ; health behaviors; healthrelated behaviors; psychological functioning; binge eating disorder; nocturnal eating syndrome; alcohol use disorder; smoking; physical activity; purging; assessment; psychiatric assessment.

The EDE-Q main attribute is its consistency to identify problematic behavior in long follow-up. It has been validated in multiple studies and has been correlated with other assessments like the NEQ. The QWEP-R becomes a better option for the diagnosis of BED due to its specificity and its validity. QWEP-R was also used in a long-term study that analyzed alcohol consumption and binge eating. The AUDIT comes as an essential assessment because of the dangers of alcoholism even when the literature is complicated as to the development of alcoholism after the surgery. Lastly, the NEQ becomes a great assessment for NES due to its correlations with other tests. Lastly, There is a need for standardization of health assessments as well as a revision for Binge eating in the DSM-5 for the bariatric population due to their new lifestyle.





Take a picture to access the full abstract



### METHODS

#### • Literature review

• Adults aged 18 or older

#### RESULTS

- Assessments identified:
- Eating Disorder Examination Questionnaire (EDE-Q)
- Questionnaire on Eating and Weight Patterns Revised (QEWP-R)
- Alcohol Use Disorders Identification Test (AUDIT)
- Night Eating Questionnaire (NEQ)

### **DISCUSSION & CONCLUSION**

### ACKNOWLEDGEMENT

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