

Eating Disorders

Anorexia Nervosa • Bulimia Nervosa • Binge Eating Disorder

SYSTEM: MENTAL HEALTH / PSYCHIATRIC • DSM-5-TR ALIGNED



Anorexia Nervosa

Restriction + fear of weight gain. BMI < 18.5, distorted body image, amenorrhea, bradycardia. *Highest mortality of any mental illness.*



Bulimia Nervosa

Binge + purge cycle. Usually normal weight. Russell's sign, dental erosion, hypokalemia → arrhythmia risk.



Binge Eating Disorder

Binge WITHOUT purging. Most common eating disorder in U.S. Linked to obesity, T2DM, metabolic syndrome.



Universal Red Flags — Call Provider Immediately



HR < 40 or > 110 bpm



K⁺ < 3.0 mEq/L



Temperature < 96 °F (35.5 °C)



Suicidal ideation



BP < 80/50 or orthostatic drop



Phosphorus ↓ after refeeding



Syncope, chest pain, confusion



Rapid weight loss > 1 lb/wk when unstable

Color legend: ■ Definition ■ Pathophysiology ■ Signs & Symptoms ■ Interventions ■ Pharmacology
■ NCLEX Traps ■ Education



Anorexia Nervosa

MENTAL HEALTH • DSM-5-TR • ICD-10: F50.0

1 Definition / Overview

- ▶ **Restriction of energy intake** leading to significantly low body weight (BMI < 18.5 adults; < 5th percentile in youth).
- ▶ **Intense fear** of gaining weight + **distorted body image** — sees self as "fat" despite being underweight.
- ▶ Two subtypes: **Restricting** (dieting/fasting/exercise) and **Binge-eating/Purging**.
- ▶ ⚠ **Highest mortality rate** of any psychiatric disorder — cardiac arrest & suicide.

2 Pathophysiology (Simplified)



3 Signs & Symptoms

EARLY / BEHAVIORAL

- ▶ Obsessive calorie counting & ritualistic eating
- ▶ Excessive exercise, "food rules"
- ▶ Wearing baggy clothes, hiding body
- ▶ Social withdrawal during meals
- ▶ Perfectionism, rigidity, denial of hunger
- ▶ Amenorrhea (≥ 3 missed cycles)

LATE / PHYSICAL

- ▶ **Emaciation**, sunken eyes, muscle wasting
- ▶ **Lanugo** (fine body hair), dry skin, brittle nails/hair loss
- ▶ **Bradycardia, hypotension, hypothermia**
- ▶ Peripheral edema, yellow skin (↑ carotene)
- ▶ Osteopenia / osteoporosis, stress fractures
- ▶ Cold intolerance, syncope

🚨 **RED FLAG findings — hospitalize:** HR < 40 • BP < 80/50 • orthostatic Δ HR > 20 • temp < 96 °F • K⁺ < 3.0 • Mg²⁺ ↓ • phosphorus ↓ • glucose < 60 • QTc prolonged • syncope • weight < 75% IBW.

🧠 **Complications:** cardiac arrhythmia, cardiomyopathy, osteoporosis, infertility, refeeding syndrome, seizures, death.

4 Priority Nursing Interventions (ABC + Safety)

🔥 Airway / Circulation

- ▶ **Monitor cardiac rhythm** — telemetry if K⁺/Mg²⁺ abnormal
- ▶ Vital signs q4h; orthostatic BP daily
- ▶ Daily weight: **same time, same scale, after voiding, in gown, BACK-to-scale**
- ▶ Strict I&O; watch fluid overload during refeeding

🛡️ Safety / Behavioral

- ▶ **Supervise meals** + stay with patient **1 hr post-meal** (prevent purging/hiding food)
- ▶ Lock bathroom; supervise elimination if purging suspected
- ▶ Limit exercise; enforce rest periods
- ▶ Refeed SLOW: start **1,200–1,500 kcal/day**, ↑ 200 kcal q2–3d — **prevent refeeding syndrome**
- ▶ Monitor phosphorus, Mg²⁺, K⁺ daily x 5–7 days
- ▶ Suicide precautions; therapeutic milieu
- ▶ **Refer:** CBT, family-based therapy (Maudsley), dietitian

🚨 **Refeeding syndrome:** rapid drop in phosphorus, Mg²⁺, K⁺ + fluid shifts → cardiac failure, seizures, death. **"Start low, go slow."**

5 Pharmacology

Olanzapine **ATYPICAL ANTIPSYCHOTIC**

Used off-label to ↑ weight & ↓ obsessive thinking

- **Benefit:** weight gain (desired here)
- **Watch:** sedation, metabolic Δ, QT prolongation

Fluoxetine (Prozac) **SSRI**

Post weight-restoration for comorbid depression/OCD

- Limited efficacy while malnourished
- Monitor suicidal ideation, serotonin syndrome

Multivitamin + Thiamine **SUPPLEMENT**

- **Thiamine BEFORE glucose/refeeding** to prevent Wernicke's
- Replace K⁺, Mg²⁺, phosphorus as ordered

Calcium + Vitamin D / Bisphosphonates **BONE**

- Combat osteoporosis from chronic low estrogen
- Encourage weight-bearing exercise only when stable

6 NCLEX Test Traps ⚠

✗ **DISTRACTOR**

"You look so much better — you've gained weight!"

✓ **CORRECT**

Praise behavior/effort, **never appearance or weight.**

✗ **DISTRACTOR**

Let the client weigh themselves facing the scale.

✓ **CORRECT**

Weigh **back-to-scale**, same conditions daily.

✗ **DISTRACTOR**

Prioritize CBT & insight therapy first on admission.

✓ **CORRECT**

ABCs first — cardiac, electrolytes, refeeding safety.

✗ **DISTRACTOR**

Rapid high-calorie refeeding to restore weight fast.

✓ **CORRECT**

Slow refeeding; monitor **phosphorus** (the hallmark lab).

7 Patient & Family Education

- ▶ Recovery is **gradual**; goal is restoring weight **0.5–1 kg/week** inpatient.
- ▶ Report dizziness, palpitations, swelling of legs — possible refeeding syndrome.
- ▶ Avoid "good/bad" food labels; follow meal plan with dietitian.
- ▶ Family therapy improves outcomes in adolescents (Maudsley approach).
- ▶ Avoid diuretics, laxatives, diet pills, and excessive exercise.
- ▶ Long-term follow-up: DEXA scan for bone density; menstrual monitoring.
- ▶ Crisis plan + therapy appointments are **non-negotiable**.

8 Memory Boosters

A-N-O-R-E-X-I-A

- A** menorrhea
- N**o appetite (denied hunger)
- O**steoporosis
- R**efuses to eat / Rigid thinking
- E**lectrolyte imbalance
- X**-tremely low weight (BMI < 18.5)
- I**mage distorted
- A**rrhythmia / Anxiety

💡 "L"s of Anorexia (physical signs):

Lanugo • Low HR • Low BP • Low temp • Low estrogen • Low bone density

💡 Refeeding mnemonic — "PMK":

Phosphorus ↓ • Magnesium ↓ • K⁺ ↓
(These three drop first — check them!)

💡 Weighing rule:

"Same Scale, Same Time, Same Gown, **Back Turned**"



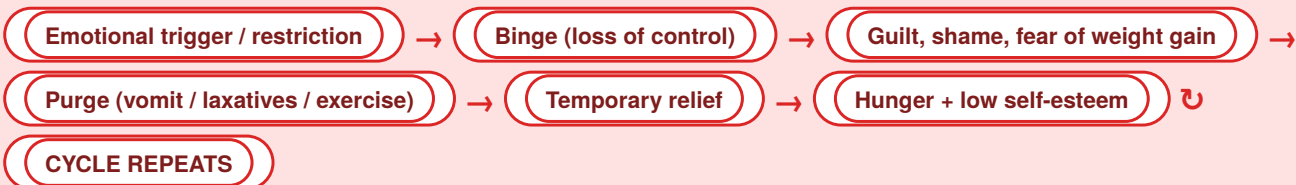
Bulimia Nervosa

MENTAL HEALTH • DSM-5-TR • ICD-10: F50.2

1 Definition / Overview

- ▶ **Recurrent binge eating** (large amount, loss of control) + **compensatory behaviors** to prevent weight gain.
- ▶ Compensation: self-induced vomiting, laxatives, diuretics, enemas, fasting, excessive exercise.
- ▶ Occurs $\geq 1 \times/\text{week}$ for ≥ 3 months (DSM-5-TR).
- ▶ Usually **normal weight or slightly overweight** — easily hidden from family.

2 Pathophysiology (The Binge-Purge Cycle)



Electrolyte chemistry: Vomiting $\rightarrow$ loss of HCl $\rightarrow$ **metabolic alkalosis** + $\downarrow$ K⁺, $\downarrow$ Cl⁻. Laxative abuse $\rightarrow$ **metabolic acidosis** + $\downarrow$ K⁺.

3 Signs & Symptoms

● BEHAVIORAL / EARLY

- ▶ Secretive eating; disappearing after meals
- ▶ Frequent bathroom trips after eating
- ▶ Hoarding or stealing food
- ▶ Running water to mask vomiting
- ▶ Mood swings, depression, impulsivity
- ▶ Preoccupation with body image

● PHYSICAL / SEVERE

- ▶ **Russell's sign** — calluses on knuckles from teeth
- ▶ **Parotid gland swelling** ("chipmunk cheeks")
- ▶ **Dental erosion** (lingual enamel loss)
- ▶ Sore throat, hoarseness, bloodshot eyes (petechiae)
- ▶ Hypokalemia $\rightarrow$ **cardiac arrhythmias**
- ▶ Esophagitis, **Mallory-Weiss tear**, GERD
- ▶ Dehydration, orthostatic hypotension

🚨 **RED FLAGS:** hematemesis (esophageal tear) • K⁺ < 3.0 • severe dehydration • arrhythmia/chest pain • QTc prolongation • suicidal ideation.

🧠 **Complications:** electrolyte imbalance, cardiac arrhythmia, esophageal rupture, aspiration, dental caries, ipecac cardiomyopathy, laxative dependence.

4 Priority Nursing Interventions (ABC + Safety)

🫀 Physiologic Stability

- ▶ **Monitor K⁺, Cl⁻, Mg²⁺, bicarb** — replace as ordered
- ▶ Continuous cardiac monitoring if severe hypokalemia / QTc $\uparrow$
- ▶ Daily weights — back-to-scale
- ▶ Assess oral cavity & dental status
- ▶ Monitor for hematemesis / abdominal pain

🛡️ Behavioral / Safety

- ▶ **Stay with client 1–2 hours after meals** (prevent purging)
- ▶ Supervise/lock bathrooms; no flushing during observation
- ▶ Structured meal plan — 3 meals + 2 snacks; eat in dining room
- ▶ Encourage **food/mood journaling** to identify triggers
- ▶ **CBT is first-line therapy**; also IPT, DBT
- ▶ Suicide precautions — high comorbidity with depression

5 Pharmacology

Fluoxetine (Prozac) FDA-APPROVED

Only SSRI FDA-approved for bulimia.

- Dose: **60 mg/day** (higher than depression dose)
- Reduces binge-purge frequency & depression
- Watch: serotonin syndrome, ↑ suicide ideation in young adults
- Takes 2–4 weeks for full effect

Potassium chloride / electrolyte replacement

SUPPLEMENT

- Oral KCl for mild; IV for $K^+ < 3.0$ or symptomatic
- **Never IV push** — infuse ≤ 10 mEq/hr peripheral
- Monitor ECG during replacement

Topiramate OFF-LABEL

- May reduce binge frequency; causes weight loss
- Side effects: paresthesia, cognitive fog, kidney stones

! **AVOID: Bupropion** CONTRA-INDICATED

- **Lowers seizure threshold** — contraindicated in bulimia & anorexia due to electrolyte imbalance risk

6 NCLEX Test Traps !

✗ **DISTRACTOR**

"This patient is normal weight so she's stable."

✓ **CORRECT**

Normal weight does **not** equal stable — check K^+ and ECG.

✗ **DISTRACTOR**

Allow bathroom privacy right after meals.

✓ **CORRECT**

Supervise bathroom for **1–2 hours after eating**.

✗ **DISTRACTOR**

Start bupropion for depressed bulimic client.

✓ **CORRECT**

Use **fluoxetine**; bupropion **contraindicated** (seizures).

✗ **DISTRACTOR**

Confuse with anorexia B/P subtype.

✓ **CORRECT**

Bulimia = normal weight. Anorexia B/P = underweight + purging.

7 Patient & Family Education

- ▶ Identify binge **triggers** — emotions, hunger, restrictive dieting, stress.
- ▶ **Do not brush teeth immediately after vomiting** — rinse with water or baking soda rinse (brushing rubs acid into enamel).
- ▶ Regular dental visits; fluoride treatments to protect enamel.
- ▶ Eat meals with others; avoid skipping meals (restriction triggers bingeing).
- ▶ Keep binge foods out of easy access at home.
- ▶ Never use syrup of ipecac — **cardiotoxic**.
- ▶ Report chest pain, blood in vomit, severe weakness immediately.
- ▶ CBT + nutrition counseling + peer/family support = best outcomes.

8 Memory Boosters

P-U-R-G-E-S

- P** arotid swelling (chipmunk cheeks)
- U** lcerated esophagus / Mallory-Weiss
- R** ussell's sign (knuckle calluses)
- G** um & dental erosion
- E** lectrolytes ↓ (esp. K^+)
- S** ecretive binge-purge cycle

💡 **"Normal weight, abnormal labs"**

The single biggest clue for bulimia vs anorexia on NCLEX.

💡 **Acid-base shortcut:**

Vomit = alkalOsis (O up top, like food coming up)

Laxatives = acidOsis (O on bottom, like stool going out)

💡 **Drug trick:**

Fluoxetine For bulimia (FDA). Bupropion = **Bad** (seizures).



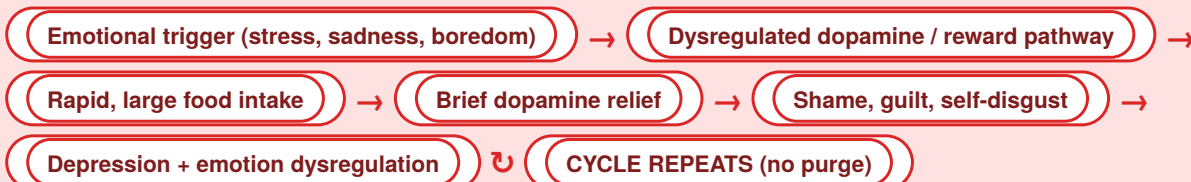
Binge Eating Disorder (BED)

MENTAL HEALTH • DSM-5-TR • ICD-10: F50.81

1 Definition / Overview

- ▶ **Recurrent binge eating WITHOUT compensatory behaviors.** This is the key differentiator from bulimia.
- ▶ Binge = large amount in discrete period + **loss of control**.
- ▶ Occurs $\geq 1 \times/\text{week}$ for ≥ 3 months, with marked distress.
- ▶ **Most common eating disorder** in the U.S. (~2–3% adults). Equal rates across genders & ethnic groups.
- ▶ Usually associated with **overweight / obesity** but not required.

2 Pathophysiology (Emotional Eating Loop)



Chronic result: excess caloric intake → **obesity, insulin resistance, type 2 DM, hyperlipidemia, HTN, CAD, OSA, NAFLD.**

3 Signs & Symptoms (DSM-5-TR: ≥ 3 of 5 features)

BEHAVIORAL HALLMARKS

- ▶ Eating **much more rapidly than normal**
- ▶ Eating until **uncomfortably full**
- ▶ Eating large amounts **when not hungry**
- ▶ Eating **alone due to embarrassment**
- ▶ Feeling **disgusted, depressed, or guilty** after
- ▶ No purging, fasting, or excessive exercise

PHYSICAL / METABOLIC

- ▶ **Obesity** (BMI ≥ 30), weight fluctuations
- ▶ **Metabolic syndrome:** $\uparrow$ BP, $\uparrow$ glucose, $\uparrow$ triglycerides
- ▶ Type 2 diabetes, insulin resistance
- ▶ Cardiovascular disease, sleep apnea
- ▶ GERD, gallbladder disease, NAFLD
- ▶ Joint pain, reduced mobility

RED FLAGS: suicidal ideation (high comorbidity with depression) • uncontrolled DM / DKA risk • chest pain / acute MI • severe OSA with hypoxia.

Complications: obesity, T2DM, HTN, dyslipidemia, CAD, stroke, OSA, NAFLD, GERD, depression, anxiety, substance use disorder.

4 Priority Nursing Interventions

Physiologic / Medical

- ▶ Assess BP, glucose, A1C, lipids — treat metabolic syndrome
- ▶ Screen for OSA, NAFLD, cardiovascular risk
- ▶ Coordinate with dietitian for structured meal plan (regular meals/snacks)
- ▶ Gradual weight management — **avoid restrictive dieting** (triggers bingeing)

Behavioral / Safety

- ▶ **CBT is first-line** — targets thoughts, triggers, emotion regulation
- ▶ Interpersonal therapy (IPT), DBT for emotion dysregulation
- ▶ Encourage **food & mood journaling** to identify triggers
- ▶ Mindful eating techniques — eat slowly, no screens
- ▶ Screen for depression, anxiety, SI — refer to mental health
- ▶ Support groups (OA, peer-led BED groups)

5 Pharmacology

Lisdexamfetamine (Vyvanse) FDA-APPROVED

ONLY FDA-approved drug specifically for moderate-severe BED.

- CNS stimulant prodrug of dextroamphetamine
- Reduces binge days per week
- **Watch:** ↑ HR, ↑ BP, insomnia, appetite suppression, abuse potential (**Schedule II**)
- Contraindicated: structural heart disease, MAOI use

Fluoxetine / other SSRIs OFF-LABEL

- Helps comorbid depression & reduces binge frequency
- Monitor SI, serotonin syndrome

Topiramate OFF-LABEL

- Reduces binges + weight loss
- SE: paresthesia, cognitive slowing, nephrolithiasis

GLP-1 agonists (semaglutide, liraglutide) EMERGING

- Used for obesity-related comorbidities
- Monitor: N/V, pancreatitis, gallbladder disease

6 NCLEX Test Traps ⚠

✗ **DISTRACTOR**

Recommend strict calorie restriction to reverse obesity.

✓ **CORRECT**

Avoid dieting — restriction triggers binges. Focus on regular, balanced meals.

✗ **DISTRACTOR**

Binge eating = bulimia.

✓ **CORRECT**

BED has **NO compensatory behaviors** — that's the defining line.

✗ **DISTRACTOR**

Prescribe fluoxetine as the FDA-approved drug for BED.

✓ **CORRECT**

Lisdexamfetamine is the only FDA-approved drug for BED.

✗ **DISTRACTOR**

Address weight first, therapy later.

✓ **CORRECT**

CBT + structured eating first; weight loss follows behavior change.

7 Patient & Family Education

- ▶ **Don't skip meals** — hunger + restriction = biggest binge trigger.
- ▶ Practice **mindful eating**: sit at a table, eat slowly, no phones/TV, notice fullness cues.
- ▶ Keep a food + mood journal to identify emotional triggers.
- ▶ Develop non-food coping: walk, call friend, journal, breathing exercises.
- ▶ Report lisdexamfetamine side effects: racing heart, chest pain, severe insomnia, mood changes.
- ▶ Never abruptly stop SSRIs — risk of discontinuation syndrome.
- ▶ Attend CBT + support groups — BED responds very well to therapy.
- ▶ Screen for and treat depression, anxiety, and substance use concurrently.

8 Memory Boosters

B-I-N-G-E

- B** ig amounts in short time
- I** n secret / alone (shame)
- N** o purging or compensation
- G** uilt, disgust, depression
- E** motional trigger → emotional eating

💡 **DSM-5-TR 3-of-5 rule:**

Rapid • Uncomfortably full • Not hungry • Alone • Guilty
Need ≥ 3 of these features to diagnose.

💡 **Drug memory:**

Vyvanse for Voracious eating (BED)
Fluoxetine for bulimia (FDA bulimia)

💡 **BED vs Bulimia shortcut:**

"Binge + Purge = Bulimia"
"Binge alone = BED"

Side-by-Side NCLEX Comparison

Feature	Anorexia Nervosa 🦋	Bulimia Nervosa 🔄	Binge Eating Disorder 🍷
Weight	Significantly low (BMI < 18.5)	Normal or slightly overweight	Often overweight / obese
Key behavior	Restriction ± purging	Binge + purge	Binge WITHOUT compensation
Self-image	Distorted — sees self as fat	Dissatisfied but realistic	Usually realistic; shame-driven
Classic sign	Lanugo, bradycardia, amenorrhea	Russell's sign, parotid swelling, dental erosion	Obesity + metabolic syndrome
Key lab	↓ K ⁺ , ↓ phosphorus, ↓ Mg ²⁺ , ↓ WBC, ↓ T3	↓ K ⁺ , ↓ Cl ⁻ , metabolic alkalosis	↑ glucose, ↑ A1C, ↑ lipids
Biggest danger	Refeeding syndrome, cardiac arrest	Hypokalemia → arrhythmia, esophageal tear	T2DM, CV disease, OSA
First-line therapy	FBT (Maudsley) in teens; CBT-E in adults; nutrition rehab	CBT-E	CBT-E (also IPT, DBT)
Top medication	Olanzapine (off-label); fluoxetine after weight restored	Fluoxetine 60 mg (FDA-approved)	Lisdexamfetamine (FDA-approved)
Nursing priority	Slow refeeding; monitor phosphorus; cardiac	Electrolytes; 1–2 hr post-meal supervision	CBT + structured meals, not restriction
"DO NOT" pearls	❌ Do NOT praise weight gain appearance. ❌ No rapid refeeding.	❌ Do NOT give bupropion. ❌ Do NOT brush teeth right after vomiting.	❌ Do NOT put on restrictive diet. ❌ Do NOT use Vyvanse with heart disease or MAOI.

Final NCLEX Pearls

✅ Always Do (Right-answer cues)

- ▶ **ABCs first** — cardiac rhythm, electrolytes, airway before therapy.
- ▶ Weigh **same scale, same time, gown, back-to-scale**.
- ▶ Supervise meals and **1–2 hr post-meal**.
- ▶ Give **thiamine BEFORE glucose** in refeeding.
- ▶ Monitor **phosphorus, Mg²⁺, K⁺** — the refeeding trio.
- ▶ Use **CBT** as cornerstone for all three disorders.
- ▶ Screen for **suicide risk** in every encounter.

❌ Never Do (Distractor cues)

- ▶ Don't **praise appearance/weight** — praise coping.
- ▶ Don't let client **see the scale**.
- ▶ Don't **refeed rapidly**.
- ▶ Don't use **bupropion** in bulimia or anorexia.
- ▶ Don't **restrict calories** in BED.
- ▶ Don't skip **electrolyte checks** in normal-weight bulimia.
- ▶ Don't promise **confidentiality** if suicide risk is present.