NGN NCLEX 2026 · GASTROINTESTINAL · LOWER GI

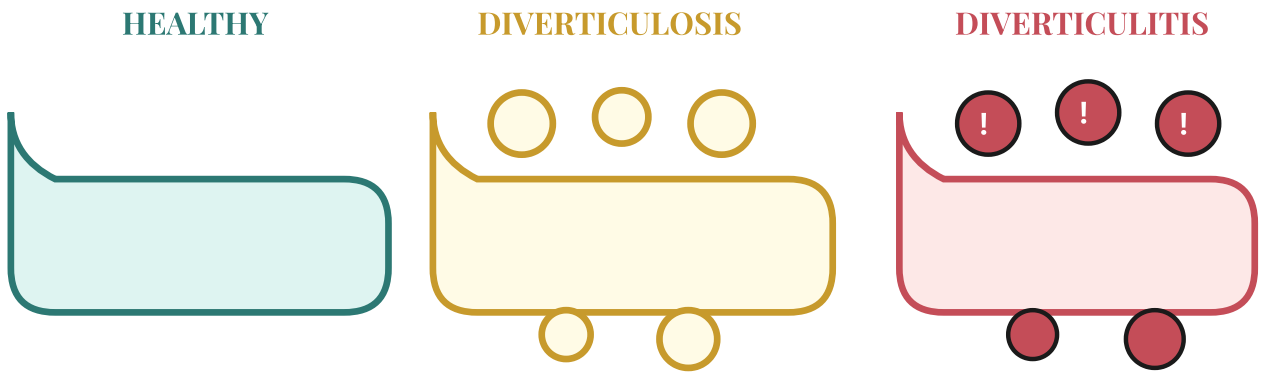
Diverticulosis *vs.* Diverticulitis

High-yield clinical judgment review: pathophysiology, prioritization, and the critical pivot from a low-fiber acute diet to lifelong high-fiber prevention.

HIGH-YIELD | NCJMM ALIGNED | ACUTE CARE FOCUS

1 Definition & Overview

WHAT IT IS · WHY IT MATTERS



Diverticulosis

THE POUCHES · ASYMPTOMATIC

- **What:** Outpouchings (diverticula) in the colon wall — most often the **sigmoid colon**.
- **Symptoms:** Usually **none**; often discovered incidentally.
- **Cause:** Chronic low-fiber diet → constipation → ↑ intracolonic pressure.
- **Goal:** Prevent progression to diverticulitis.

Diverticulitis

THE POUCHES INFLAMED · ACUTE

- **What: Inflammation/infection** of one or more diverticula (often from trapped stool/food).
- **Symptoms:** LLQ pain, fever, leukocytosis, N/V.
- **Cause:** Microperforation of a pouch → bacterial invasion of the colon wall.
- **Goal:** Bowel rest, antibiotics, prevent perforation/peritonitis.

2 Pathophysiology

STEP-BY-STEP MECHANISM

STEP 1
Low-fiber diet
Hard, dry stool · chronic constipation.

→

STEP 2
↑ Intracolonic pressure
Straining pushes against weak spots in the colon wall.

→

STEP 3
Diverticula form
Sac-like outpouchings (=**diverticulOSIS**).

STEP 4
Stool/food traps
Trapped contents block the pouch neck.

→

STEP 5
Inflammation & infection
Bacteria invade pouch wall → microperforation.

→

STEP 6
DiverticulITIS
LLQ pain, fever, leukocytosis · risk for rupture & peritonitis.

3 Signs & Symptoms

MILD → SEVERE · RED FLAGS 🚨

Diverticulosis is typically *silent*. The cues below describe **diverticulitis** — the acute, inflamed presentation tested on NCLEX.

Mild / Early Diverticulitis

- **LLQ pain** — crampy, intermittent (sigmoid is on the LEFT)
- Low-grade fever, chills
- Nausea ± vomiting
- Change in bowel habits — constipation OR diarrhea
- Bloating, flatulence, anorexia
- Mild leukocytosis (↑ WBC)
- Palpable tender LLQ mass possible

Severe / Complicated 🚨

- 🚨 **Rigid, board-like abdomen** → peritonitis
- 🚨 **Rebound tenderness** & guarding
- 🚨 **Absent bowel sounds** (paralytic ileus / obstruction)
- 🚨 **High fever > 101°F**, chills, marked leukocytosis
- 🚨 **Tachycardia + hypotension** → sepsis/shock
- 🚨 Bright red rectal bleeding (hemorrhage)
- 🚨 Pneumaturia / fecaluria → fistula to bladder

4 Diagnostics

CONFIRM · AND WHAT TO AVOID ACUTELY

✓ Preferred Workup

- **CT scan with contrast** — gold standard; shows inflammation, abscess, perforation
- **CBC** — ↑ WBC with left shift (infection)
- **CMP**, lactate — assess hydration, sepsis
- **Stool guaiac** — occult blood
- **Abdominal X-ray** — rule out free air (perforation)
- **Colonoscopy** — only AFTER acute episode resolves (4–6 weeks) to rule out malignancy

✗ AVOID Acutely

- **Barium enema** — risk of perforation
- **Colonoscopy** during acute flare — risk of perforation
- **Enemas / laxatives** that ↑ pressure
- **Digital rectal exam** may be deferred if severe pain

5 Priority Nursing Interventions

ABCS · SAFETY · NCLEX PRIORITIZATION

A	**Assess for peritonitis FIRST.** Rigid abdomen, rebound tenderness, absent bowel sounds, fever, tachycardia, hypotension → notify HCP immediately. Surgical emergency.
B	**Bowel rest:** Maintain **NPO** in acute phase → progress to clear liquids → low-residue (low-fiber) diet as inflammation resolves → high-fiber diet long-term.
C	**Circulation/Fluids:** Administer IV fluids (NS or LR) to maintain hydration and BP. Strict I&O.
D	**Drugs:** Administer IV broad-spectrum antibiotics (e.g., metronidazole + ciprofloxacin). Give analgesics — **avoid morphine** (↑ intracolonic pressure); acetaminophen preferred.
E	**Equipment:** Insert **NG tube to low intermittent suction** if obstruction, ileus, or persistent vomiting. Monitor drainage.
F	**Fever/Sepsis:** Monitor temperature, WBC, lactate, MAP. Implement Hour-1 sepsis bundle if criteria met.
G	**Gait/Position:** Semi-Fowler's for comfort. Avoid heavy lifting, bending, straining. NO enemas during acute phase.
H	**Hemorrhage watch:** Monitor stool for bright red blood; track Hgb/Hct. Severe bleeding may require transfusion or surgery.

6 Pharmacology

DRUGS · MOA · SIDE EFFECTS · NURSING PEARLS

Drug / Class	Mechanism	Key Side Effects	Nursing Considerations
Metronidazole (Flagyl) *Anti-anaerobic antibiotic*	Disrupts DNA in anaerobes (gut bacteria).	Metallic taste, dark urine, peripheral neuropathy, disulfiram reaction with alcohol.	**NO ALCOHOL** during & for 48 h after; warn re: dark urine; report numbness/tingling.
Ciprofloxacin (Cipro) *Fluoroquinolone*	Inhibits bacterial DNA gyrase (gram-neg coverage).	Tendon rupture (Achilles), QT prolongation, photosensitivity, C. diff.	Avoid antacids/dairy/iron within 2 h; sunscreen; report tendon pain immediately.
Amoxicillin-clavulanate (Augmentin) *Penicillin combo*	Cell wall inhibitor + β-lactamase inhibitor.	Diarrhea, rash, hypersensitivity.	Assess penicillin allergy; take with food to ↓ GI upset.
Acetaminophen *Analgesic / antipyretic*	↓ prostaglandin synthesis in CNS.	Hepatotoxicity (max 4 g/day; 3 g if liver disease/EtOH).	**Preferred** analgesic — does not raise intracolonic pressure.
Opioids (cautious) *e.g., hydromorphone*	Mu-receptor agonists.	Constipation, sedation, respiratory depression.	**AVOID morphine** (↑ colonic pressure → perforation risk). Use lowest effective dose.
Bulk-forming laxatives *Psyllium (Metamucil), methylcellulose*	Adds soluble fiber → soft, formed stool.	Bloating, gas if introduced too fast.	Used **after** acute resolution & long-term; full glass of water with each dose.
Antispasmodics *Dicyclomine (Bentyl)*	Anticholinergic — ↓ smooth muscle spasm.	Dry mouth, blurred vision, urinary retention, tachycardia.	Avoid in glaucoma, BPH, paralytic ileus.

7 Complications

RECOGNIZE EARLY · PREVENT DISASTER

Perforation

Pouch ruptures into peritoneum → sudden severe pain, rigid abdomen. SURGICAL EMERGENCY.

Peritonitis

Diffuse infection of peritoneal cavity. Board-like abdomen, rebound tenderness, sepsis.

Abscess

Walled-off infection. Persistent fever despite antibiotics → may need percutaneous drainage.

Fistula

Most common = colovesical (to bladder) → pneumaturia, fecaluria, recurrent UTIs.

Bowel Obstruction

Scarring narrows lumen. Distention, absent BS, vomiting, no flatus or stool.

Hemorrhage

Painless, bright red rectal bleeding from eroded vessel. Monitor Hgb/Hct, vitals.

8 NCLEX Test Traps ⚠

WRONG ANSWERS STUDENTS PICK · RIGHT PRIORITY

✗ TRAP	✓ PRIORITY
Teaching a client in **acute diverticulitis** to start a high-fiber diet right now.	Acute = **NPO → clear liquids → low-fiber/low-residue**. High-fiber is for prevention *after* resolution.
Administering **morphine** for severe pain.	Morphine ↑ intracolonic pressure → perforation risk. Use **acetaminophen** or non-morphine opioid (hydromorphone).
Preparing the client for **colonoscopy or barium enema** during the acute flare.	**CT with contrast** is gold standard acutely. Scope is delayed 4–6 weeks (perforation risk).
Giving an **enema** to relieve constipation in acute diverticulitis.	NO enemas/cathartics acutely — they ↑ pressure and may cause perforation.
Confusing pain location: choosing RLQ (appendicitis-style).	Diverticulitis pain is classically **LLQ** (sigmoid colon). RLQ = think appendicitis.
Documenting "rigid abdomen, fever, hypotension" and continuing routine care.	That triad = **peritonitis/sepsis**. Notify HCP immediately, anticipate fluids, IV antibiotics, surgical consult.

9 NCJMM Clinical Judgment Scenario

RECOGNIZE · ANALYZE · PRIORITIZE · GENERATE · TAKE ACTION · EVALUATE

Scenario: *A 68-year-old client admitted yesterday for diverticulitis reports new sudden, sharp LLQ pain that has spread across the entire abdomen. Vitals: T 102.4°F, HR 122, BP 88/54, RR 24. Abdomen is* ***rigid*** *with rebound tenderness; bowel sounds are absent. WBC 21,000.*

STEP 1

Recognize Cues

Diffuse pain, rigid abdomen, rebound, absent BS, fever, tachycardia, hypotension, ↑ WBC.

STEP 2

Analyze Cues

Cluster = **perforation → peritonitis with sepsis**. Highly time-sensitive.

STEP 3

Prioritize Hypotheses

#1 Perforation/peritonitis & septic shock. Differential: bowel obstruction, ruptured AAA — but rigid abdomen + diverticulitis Hx points to perforation.

STEP 4

Generate Solutions

Notify HCP/Rapid Response · large-bore IV access · fluid resuscitation · broad-spectrum IV antibiotics · NPO · NG tube · prep for emergent surgery (Hartmann's procedure).

STEP 5

Take Action

Call HCP NOW · 30 mL/kg NS bolus · draw lactate, blood cultures BEFORE antibiotics · administer antibiotics within 1 hour · O2 to keep SpO_2 ≥ 94%.

STEP 6

Evaluate Outcomes

MAP ≥ 65 mmHg, lactate trending down, urine output ≥ 0.5 mL/kg/hr, pain controlled, abdomen softening post-op.

10 Patient & Family Education

PREVENTION · LIFESTYLE · WHEN TO CALL

↑ Dietary fiber (long-term)
25–30 g/day from whole grains, fruits, vegetables, legumes — **after** the acute flare resolves.

↑ Fluids
2–3 L/day unless contraindicated — fiber without water = constipation.

Regular exercise
Daily walking promotes peristalsis and reduces intracolonic pressure.

Avoid straining
Don't strain on the toilet, lift heavy objects, or wear tight belts/clothing.

Bowel routine
Respond to the urge — don't delay defecation. Stool softeners as ordered.

Acute diet
During a flare: clear liquids → low-fiber/low-residue → reintroduce fiber slowly over weeks.

Nuts, seeds, popcorn?
Older guidance restricted these — **current evidence does NOT support routine avoidance**. Follow your HCP's recommendation; NCLEX may still test the classic restriction.

🚨 Call 911 / HCP NOW for:
Severe abdominal pain, rigid abdomen, high fever, vomiting, bright red rectal bleeding, fainting, or no stool/gas with distention.

Antibiotic adherence
Finish entire course; no alcohol with metronidazole (× 48 h after); report tendon pain on cipro.

Follow-up colonoscopy
Schedule 4–6 weeks after recovery to rule out colon cancer.

11 Memory Boosters

MNEMONICS · PATTERN RECOGNITION

DIVERT

- **D** Diet (low-fiber acutely → high-fiber long-term)
- **I** IV fluids & antibiotics
- **V** Vital signs (watch for sepsis)
- **E** Elimination — no enemas, no laxatives acutely
- **R** Rest the bowel (NPO/NG tube)
- **T** Tylenol for pain (NOT morphine)

LLQ

- **L** Left side pain (sigmoid colon)
- **L** Leukocytes ↑
- **Q** Quick to perforate — assess for peritonitis

"OSIS vs ITIS"

OSIS = pouches just sitting there (silent, prevent with fiber)

ITIS = pouches inflamed/infected (NPO, antibiotics, hospital)

Tip: "ITIS = Infection Inside The Sac"

FIBER

- **F** Fluids together (2–3 L/day)
- **I** Increase gradually
- **B** Bowel movements regular
- **E** Exercise daily
- **R** Refrain from straining

⚡ PRIORITY ANCHORS ⚡

LLQ
pain
+
fever
+ 🚶

1. **WBC** = think diverticulitis.

Rigid
+
rebound
+
absent

2. **BS** = peritonitis → call HCP NOW.

Acute **Prevention**
= =
LOW **HIGH**

3. **fiber** **fiber** Don't flip these on test day.

4. **No barium enema, no colonoscopy, no enemas, no morphine** during the acute flare.
5. **CT with contrast** is the diagnostic answer in the acute setting.