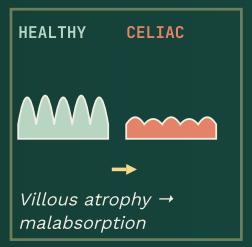
PEDIATRIC NURSING · NGN NCLEX 2026 · HIGH-YIELD REVIEW

Celiac *Disease*

An autoimmune reaction to gluten that destroys the small intestine's villi — causing malabsorption, failure to thrive, and the classic pediatric "pot belly."

GI · AUTOIMMUNE



What's happening inside?

Gluten (a protein in **wheat, barley, rye**) triggers an autoimmune response in genetically predisposed kids (**HLA-DQ2 / HLA-DQ8**). Immune attack flattens the **villi of the small intestine** → surface area collapses → **nutrients, fat, & vitamins can't absorb**. The result: chronic diarrhea, steatorrhea, anemia, and failure to thrive.

01 Signs & Symptoms

Steatorrhea
foul · fatty · floats

Distended Abdomen
"pot belly"

Failure to Thrive
↓ weight · ↓ height

Iron-Def. Anemia
pale · fatigue

Irritable · Lethargic

Wasted Buttocks

Vomiting · Pain

Delayed Puberty

behavior changes | muscle wasting | anorexia | chronic cases

★ Classic NCLEX Presentation

Thin extremities + protuberant abdomen

A toddler (typically **6 mo – 2 yrs**, after gluten is introduced) with a pot belly, wasted buttocks, pale skin, and foul-smelling bulky stools. Appears irritable and underweight despite "normal" intake. This picture is high-yield for NGN select-all-that-apply (SATA) item types.

02 Diagnostics & Labs

SEROLOGY · FIRST LINE

Antibody Testing

tTG-IgA	**Tissue Transglutaminase IgA** Most sensitive/specific screen	↑↑ ELEVATED
EMA	**Endomysial Antibodies** Confirms tTG-IgA result	↑ POSITIVE
Total IgA	**Rules out IgA deficiency** (common false-neg source)	BASELINE
HLA	**HLA-DQ2 / HLA-DQ8** Genetic susceptibility	POSITIVE

GOLD STANDARD

Small Bowel Biopsy

Endoscopy with biopsy confirms diagnosis. Child must still be **eating gluten** for accurate results — do NOT start gluten-free diet until biopsy is complete.

- **Villous atrophy** (flat villi)
- Crypt hyperplasia
- Intraepithelial lymphocytes

SUPPORTING LABS: ↓ Hgb, ↓ Iron, ↓ Vit D, ↓ Folate, ↓ B12, ↓ Albumin

03 Treatment — The Only Cure Is Diet

AVOID the "BROW"

Memory hook → foods that contain gluten

GLUTEN-FREE · SAFE

What Kids CAN Eat

B	R	O	W
BARLEY	RYE	OATS*	WHEAT

** Oats are naturally gluten-free BUT frequently cross-contaminated during processing. Use only certified gluten-free oats. Watch for hidden gluten: malt, soy sauce, broth, processed meats, seasonings, medications.*

Emphasize **naturally GF whole foods** — cheaper, healthier, and avoids label confusion.

- Rice
- Corn
- Potatoes
- Quinoa
- Fresh meats
- Fish
- Eggs
- Dairy
- Fruits
- Vegetables
- Beans / Legumes
- Nuts
- Buckwheat
- Millet

⚠ *Celiac Crisis — Medical Emergency*

Rare but life-threatening, often triggered by infection or gluten exposure. Watch for **severe profuse watery diarrhea, vomiting, dehydration, hypotension, metabolic acidosis, hypokalemia, and hyponatremia**. Priority: **IV fluids, electrolyte correction, corticosteroids**, and strict NPO/dietary management. Monitor for shock.

04 Nursing Priorities & Teaching

ASSESS

Recognize Cues

- Growth charts — plot weight & height
- Stool pattern & appearance
- Abdominal distention / tenderness
- Skin, energy, mood changes
- Dietary history & gluten exposure

TEACH

Family Education

- **Lifelong** gluten-free diet (no cheat days)
- Read EVERY food label — hidden gluten
- Separate utensils / toaster to avoid cross-contamination
- Notify school, daycare, restaurants
- Refer to dietitian + support group

MONITOR

Evaluate Outcomes

- Weight gain & linear growth
- Resolution of diarrhea & steatorrhea
- Lab improvement (Hgb, iron, tTG-IgA ↓)
- Energy & behavior normalize
- Vitamin supplementation adherence

NGN Clinical Judgment Model

APPLIED TO CELIAC DISEASE

1	2	3	4	5	6
Recognize Cues	**Analyze Cues**	**Prioritize**	**Generate Solutions**	**Take Action**	**Evaluate Outcomes**
Steatorrhea, distended abdomen, FTT, anemia	Link sx → villous atrophy → malabsorption	Dietary teaching, growth, hydration, safety	GF diet plan, label literacy, vitamin support	Teach family, monitor intake, avoid BROW foods	Growth velocity ↑, labs normalize, sx resolve

⚠ NEVER MISS

Complications

- Osteoporosis (calcium/Vit D ↓)
- Anemia (iron/folate ↓)
- Lymphoma (long-term)
- Infertility, delayed puberty
- **Celiac crisis** (emergency)

☆ HIGH-YIELD PEARLS

Test Tips

- Symptoms start after gluten introduction (~6 mo)
- KEEP eating gluten until biopsy done
- Treatment = diet, NOT medication
- Confused with lactose intolerance — NOT the same
- Screen relatives (10% risk if 1st-degree)

PRIORITY DX

Top Nursing Dx

- Imbalanced nutrition: less than body req.
- Diarrhea r/t malabsorption
- Risk for fluid volume deficit
- Delayed growth & development
- Deficient knowledge (family/child)

NGN NCLEX · 2026 TEST PLAN

"Gluten in = villi out. Villi out = nutrients out."

PEDIATRICS · GI SYSTEM