

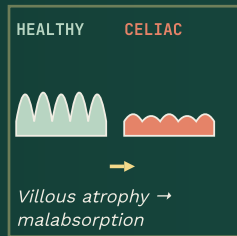
PEDIATRIC NURSING • NGN NCLEX 2026 • HIGH-YIELD REVIEW

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

BARLEY

R

RYE

O

OATS*

W

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

Recognize Cues

Steatorrhea, distended abdomen, FTT, anemia

2

Analyze Cues

Link sx → villous atrophy → malabsorption

3

Prioritize

Dietary teaching, growth, hydration, safety

4

Generate Solutions

GF diet plan, label literacy, vitamin support

5

Take Action

Teach family, monitor intake, avoid BROW foods

6

Evaluate Outcomes

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)