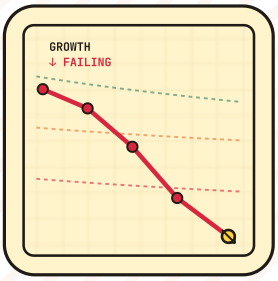
NCLEX 2026 • PEDIATRIC & PSYCHOSOCIAL INTEGRITY • HIGH-YIELD REVIEW

Failure *to* Thrive

A pediatric growth and feeding disorder rooted in inadequate nutrition, environmental stressors, or underlying medical conditions — with high-stakes implications for development, attachment, and exam prioritization.



▲ SYSTEM: GROWTH & DEVELOPMENT · PSYCHOSOCIAL · GI

<5%	≥2	150%	<72h
WEIGHT PERCENTILE	MAJOR LINES CROSSED	RDA CALORIES NEEDED	REFEEDING RISK WINDOW

1 Definition & Overview

What it is, why it matters, and how it's classified

- **Failure to Thrive (FTT)** = sustained inadequate weight gain or weight *loss* in infants/young children, often with delayed linear growth and development.
- **Diagnostic clues:** weight *below the 5th percentile* for age, OR a downward crossing of *2 or more major percentile lines* on the growth chart.
- **Why it matters:** Prolonged FTT can cause permanent cognitive, behavioral, social, and immune deficits — earlier intervention = better outcomes.

CLASSIFICATION

⚖️ Three Types

Organic FTT — underlying medical cause (CHD, GERD, cleft palate, cystic fibrosis, malabsorption, renal disease).

Non-organic (psychosocial) FTT — environmental: neglect, poverty, poor caregiver bonding, food insecurity, postpartum depression in caregiver.

Mixed FTT — both factors present (most common in practice).

2 Pathophysiology — Simplified

The four pathways that lead to a negative energy balance

Core problem: Calories *in* < calories the body *needs to grow*. Four pathways feed this imbalance:

1. **Inadequate Intake** — Poor feeding, neglect, caregiver inexperience, oral aversion, cleft palate
2. **Poor Absorption** — Cystic fibrosis, celiac, IBD, short bowel, chronic diarrhea
3. **↑ Metabolic Need** — Congenital heart defects, hyperthyroidism, chronic infection
4. **Defective Use** — Genetic/metabolic disorders, inborn errors of metabolism

Result Cascade:

Negative energy balance → weight loss & fat depletion → linear growth slows (length/height) → head circumference declines (LATE/severe sign — brain growth compromised) → developmental delays + immune suppression + poor wound healing.

3 Signs & Symptoms

Early/mild vs late/severe — watch for red flag findings

◆ EARLY / MILD

- Weight **< 5th percentile** for age or dropping percentile lines
- Poor feeding, prolonged feeding times, refusing food
- Irritability, fussiness, weak cry
- Decreased subcutaneous fat (cheeks, thighs, buttocks)
- Mild muscle wasting; loose skin folds
- Frequent infections; delayed achievement of milestones

LATE / SEVERE — RED FLAGS

- **↓ Linear growth (stunting)** — length/height delayed
- **↓ Head circumference** — brain growth compromised (severe FTT)
- **Developmental regression** — motor, language, social delays
- **"Frozen watchfulness"** — wide eyes, minimal movement (psychosocial)
- **Hypothermia, bradycardia, hypoglycemia** — severe malnutrition
- **Lethargy, apathy, avoids eye contact** — possible neglect

Classic Behavioral Tell:

In *non-organic* FTT, infants often show **"frozen watchfulness"** — alert, wide-eyed, minimal motor activity, poor eye contact, and minimal smiling. Suggests disrupted attachment and possible neglect.

4 Priority Nursing Interventions

ABCs · Safety · Nutrition · Bonding — in that order

◆ ASSESS & MONITOR

- **Daily weight:** same scale, same time, naked or same clothing — most accurate measure
- **Plot** weight, length, & head circumference on growth chart at every visit
- **Strict I&O** and 24-hour calorie counts
- **Observe parent-child interaction** during feeding (bonding, cues, responsiveness)
- **Assess feeding skills** — suck/swallow, oral aversion, positioning
- Monitor **electrolytes, glucose, CBC** — especially before/during refeeding

◆ IMPLEMENT & EDUCATE

- **Calorie-dense feedings** — often 150% of RDA; fortify formula/foods
- **Calm, consistent feeding environment** — minimize distractions, same caregivers
- **NEVER force feed** — creates oral aversion and trauma
- **Treat ABCs first** if hypoglycemic, dehydrated, or hypothermic
- **Refeeding precautions:** introduce calories slowly; watch ↓phos, ↓K^+, ↓Mg^{2+}
- **Multidisciplinary referrals:** dietitian, social work, OT/speech, PT, primary care

⚠ Priority Pearl — Refeeding Syndrome

Onset typically within **72 hours** of nutritional rehabilitation. Watch for **hypophosphatemia, hypokalemia, hypomagnesemia**, fluid overload, and cardiac arrhythmias. *Start low, advance slow.* Daily labs the first 3–5 days.

5 Pharmacology

Caloric supplementation, micronutrients, and treating underlying causes

Pediasure / Boost Kids

HIGH-CALORIE ORAL NUTRITION

Mechanism: Calorie-dense (30 kcal/oz) complete nutrition.

Side effects: Diarrhea if advanced too fast; lactose issues.

Nursing: Offer between meals — not as a replacement. Track tolerance.

Ferrous Sulfate

IRON SUPPLEMENT

Mechanism: Replaces iron stores for hemoglobin synthesis.

Side effects: Constipation, dark/tarry stools, tooth staining.

Nursing: Give with vitamin C; use straw or dropper; *between* meals.

Multivitamin + Zinc

MICRONUTRIENT SUPPLEMENT

Mechanism: Replaces deficits (Vit D, A, zinc, B-complex).

Side effects: GI upset; zinc may cause nausea.

Nursing: Give with food to reduce GI side effects.

Omeprazole / Ranitidine

PPI / H2 BLOCKER (FOR GERD-FTT)

Mechanism: ↓ gastric acid → less reflux pain → better feeding.

Side effects: Headache, diarrhea; long-term ↓ B12 absorption.

Nursing: Give 30 min before feeds; reassess feeding tolerance.

Pancreatic Enzymes

PANCRELIPASE (CF-RELATED FTT)

Mechanism: Replaces missing pancreatic enzymes for fat/protein digestion.

Side effects: Mouth irritation; abdominal cramping.

Nursing: Give *with every meal/snack*; do not crush enteric-coated beads.

Cyproheptadine

APPETITE STIMULANT (RARELY USED)

Mechanism: Antihistamine + 5-HT antagonist → ↑ appetite.

Side effects: Sedation, dry mouth, weight gain.

Nursing: Reserved for select cases; not first-line; watch for sedation.

6 NCLEX Test Traps

Where students lose points — and how to recognize the priority answer

▲ TRAP 01 — TIMING

Weigh BEFORE the feeding, not after. Post-feed weights are inflated by fluid intake and inaccurate. Same scale + same time + same clothing (or naked) = accurate trending.

▲ TRAP 02 — PRIORITY HIERARCHY

ABCs > Safety > Nutrition > Bonding. If the child is hypoglycemic, dehydrated, or hypothermic — stabilize physiologically *first*. Psychosocial interventions come *after* the child is stable (Maslow).

▲ TRAP 03 — DON'T ASSUME ABUSE

Non-organic FTT ≠ automatic abuse/neglect. Causes include postpartum depression, poverty, food insecurity, and caregiver inexperience. Don't pick "report to CPS" unless data clearly supports it.

▲ TRAP 04 — REFEEDING RISK

The danger of starting nutrition is real. Watch for hypophosphatemia, hypokalemia, hypomagnesemia, and cardiac arrhythmias within 72 hours of refeeding. "Start low, advance slow."

▲ TRAP 05 — FORCE FEEDING

NEVER force feed. Distractors that say "feed the infant on a strict schedule until bottle is empty" are wrong. Forced feeding worsens oral aversion. Respect satiety cues.

▲ TRAP 06 — HEAD CIRCUMFERENCE

↓head circumference is a LATE sign of severe, prolonged FTT — brain growth is preserved as long as possible. If present, FTT is advanced.

▲ TRAP 07 — CALORIE MATH

Recovery often requires 150% of RDA — not normal caloric intake. Catch-up growth demands more energy. Expect fortified feeds and high-calorie supplements.

7 Patient & Caregiver Education

Teach without shaming — empower the caregiver

Feeding Schedule
Infants: every 3–4 hrs. Toddlers: 3 meals + 2–3 snacks. Consistent timing trains hunger cues.

Calm Environment
No TV, phones, or screens at meals. Reduce distractions; make eye contact; talk gently.

Solids Before Liquids
For older infants, offer solid food before milk/juice — solids are more calorie-dense.

Whole Milk 1–2 yrs
Full-fat milk for ages 1–2 (need fat for brain growth). Limit juice to < 4 oz/day.

Portion Sizes
Rule of thumb: **1 tablespoon per year of age** per food group per meal. Avoid overwhelming the plate.

Food + Weight Log
Keep a daily food diary and weekly weight log. Bring to every visit. Helps identify patterns.

Read Hunger Cues
Rooting, hand-to-mouth, fussiness = hunger. Turning away, closing mouth = full. Don't force.

Frequent Follow-up
Weight checks every 1–2 weeks initially. Praise progress; problem-solve setbacks together.

8 Memory Boosters

Mnemonics, rules of thumb, and pattern recognition

F•E•E•D

- **F** **Frequent** small meals & snacks
- **E** **Environment** calm & consistent
- **E** **Energy**-dense calories (150% RDA)
- **D** **Document** intake & daily weight

G•R•O•W

- **G** **Growth** chart at every visit
- **R** **Routine** feeding schedule
- **O** **Observe** parent–child feeding
- **W** **Weigh** daily (same scale & time)

R•E•F•E•E•D

- **R** **Risk** highest in first 72 hours
- **E** **Electrolytes**: ↓ phos, ↓ K^+, ↓ Mg^{2+}
- **F** **Fluid** overload — assess for edema
- **E** **EKG** — watch for arrhythmias
- **E** **Easy** does it — advance slowly
- **D** **Daily** labs & weights

🎯 The 5-5-2 Rule

Suspect FTT when weight is **< 5th percentile** for age, persists for **≥ 5 weeks**, OR the child has dropped **≥ 2 major percentile lines** on the growth chart. Three numbers, one quick screen.

🧠 Pattern Recognition: Organic vs Non-Organic

Clue	Organic	Non-organic
Eye contact	Normal	Avoids; "frozen watchfulness"
Weight in hospital	Slow gain even with feeds	Rapid gain with consistent feeding
Caregiver interaction	Engaged, worried	Distant, inconsistent, depressed affect
Medical workup	Positive findings	Largely negative